09/965766

=> d his

(FILE 'BEILSTEIN' ENTERED AT 17:00:06 ON 09 JUL 2002)
DELETE HIS

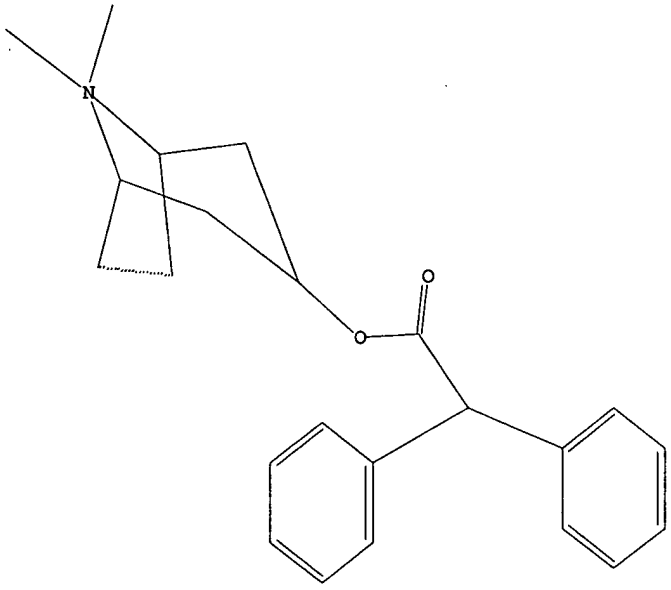
FILE 'REGISTRY' ENTERED AT 17:15:08 ON 09 JUL 2002
L1 STRUCTURE UPLOADED
L2 17 S L1
L3 STRUCTURE UPLOADED
L4 5 S L3
L5 162 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 17:19:38 ON 09 JUL 2002
L6 55 S L5
L7 4 S L4
L8 51 S L6 NOT L7
L9 10 S L8 AND PATENT/DT

FILE 'STNGUIDE' ENTERED AT 17:23:27 ON 09 JUL 2002

FILE 'CAPLUS' ENTERED AT 17:26:49 ON 09 JUL 2002
L10 41 S L8 NOT L9
L11 41 S L10 NOT HYDROXYDIPHENYLACETYL
L12 39 S L11 NOT DIPHENYL

=> d l3
L3 HAS NO ANSWERS
L3 STR



L9 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2002:291678 CAPLUS
DN 136:310064
TI Procedures for the production of new anticholinergics, and their use as drugs
IN Meissner, Helmut; Morschhaeuser, Gerd; Pieper, Helmut; Pohl, Gerald; Reichl, Richard; Speck, Georg
PA Boehringer Ingelheim Pharma K.-G., Germany
SO Ger. Offen., 28 pp.
CODEN: GWXXBX
DT **Patent**
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10050995	A1	20020418	DE 2000-10050995	20001014
WO 2002032898	A2	20020425	WO 2001-EP11243	20010928

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2000-10050995 A 20001014
OS CASREACT 136:310064; MARPAT 136:310064
GI

09/976266

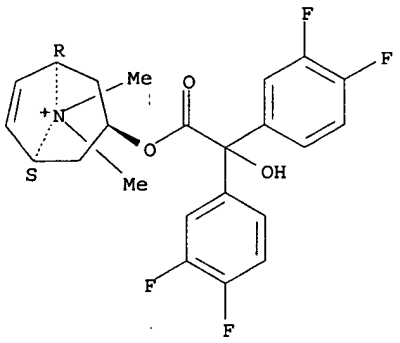
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention concerns new anticholinergics I [A = CH2CH2, CH:CH, oxirane-2,3-diyl; X- = simple anion; R1, R2 = C1-4-alkyl, C1-4-hydroxyalkyl, C1-4-haloalkyl; R3, R4, R5, R6= H, C1-4-alkyl, C1-4-alkoxy, OH, CF3, CN, NO2, halogen, whereby at least one of R3 - R6 .noteq. H] as an optically active isomers, as mixts. of enantiomers or as racemates, procedures for their prodn. as well as their use as drugs. Thus, the diphenylglycolate II.cntdot.Br- was prepd. from tropenol via transesterification of Et bis(3,4-difluorophenyl)glycolate followed by quaternization with MeBr in CH2Cl2/MeCN. Pharmaceutical formulations, for the use of I in tablets, ampuls, aerosols, solns. and inhalants, are presented.

IT **412030-72-9P 412030-73-0P 412030-74-1P**
412030-75-2P 412030-76-3P 412030-77-4P
412030-78-5P 412030-79-6P 412030-80-9P
412030-81-0P 412030-82-1P 412030-83-2P
412030-84-3P 412030-85-4P 412030-86-5P
412030-87-6P 412030-88-7P 412030-89-8P
412032-24-7P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepd. of alkaloid diphenylglycolates as anticholinergics)

RN 412030-72-9 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(3,4-difluorophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

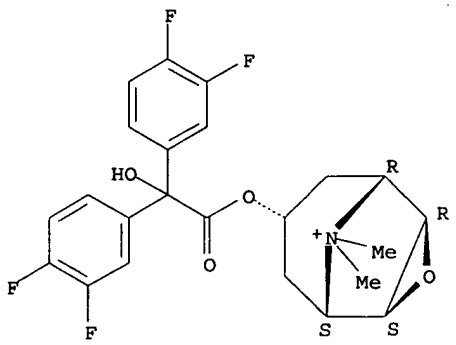
Absolute stereochemistry.



● Br^-

RN 412030-73-0 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[[bis(3,4-difluorophenyl)hydroxyacetyl]oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)

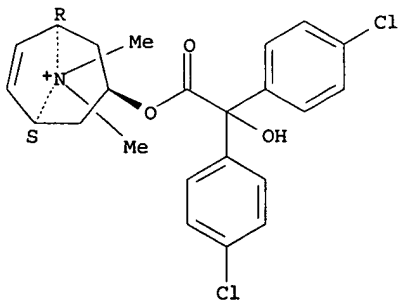
Relative stereochemistry.



● Br^-

RN 412030-74-1 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(4-chlorophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

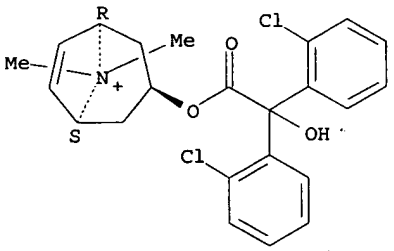
Absolute stereochemistry.



● Br^-

RN 412030-75-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(2-chlorophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

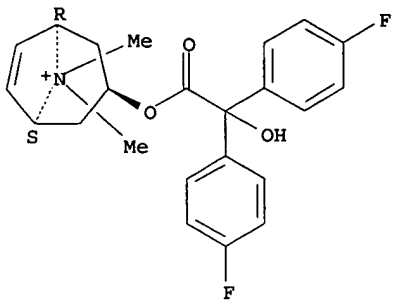
Absolute stereochemistry.



● Br^-

RN 412030-76-3 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(4-fluorophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

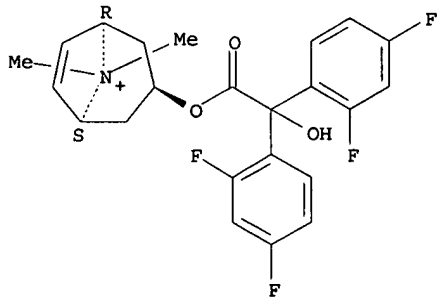
Absolute stereochemistry.



● Br^-

RN 412030-77-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(2,4-difluorophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

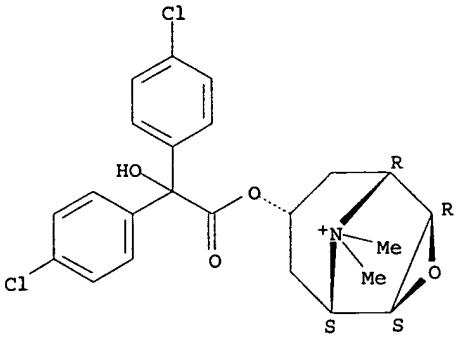
Absolute stereochemistry.



● Br^-

RN 412030-78-5 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[[bis(4-chlorophenyl)hydroxyacetyl]oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)

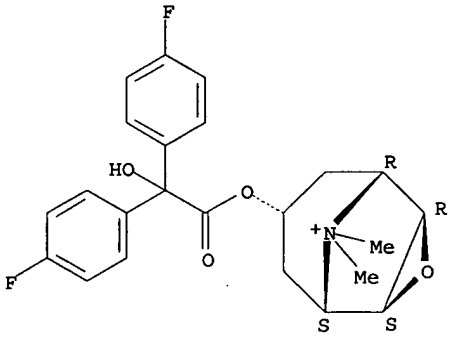
Relative stereochemistry.



● Br⁻

RN 412030-79-6 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[[bis(4-fluorophenyl)hydroxyacetyl]oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)

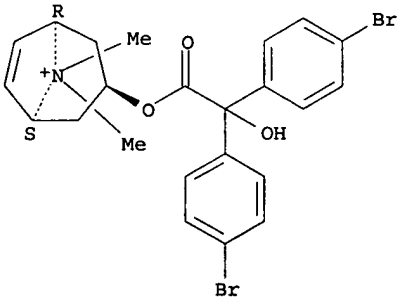
Relative stereochemistry.



● Br⁻

RN 412030-80-9 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(4-bromophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

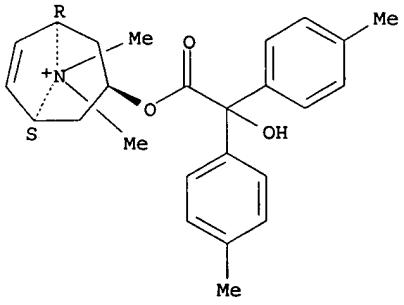


● Br⁻

RN 412030-81-0 CAPLUS

CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[hydroxybis(4-methylphenyl)acetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

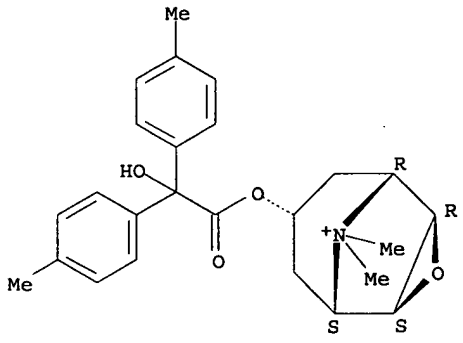
Absolute stereochemistry.



● Br^-

RN 412030-82-1 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[[hydroxybis(4-methylphenyl)acetyl]oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)

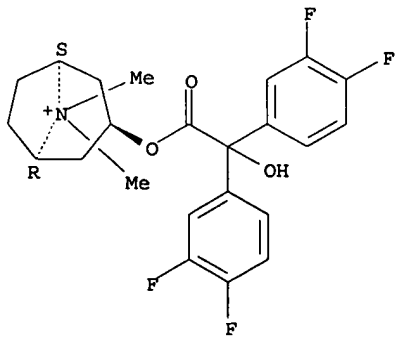
Relative stereochemistry.



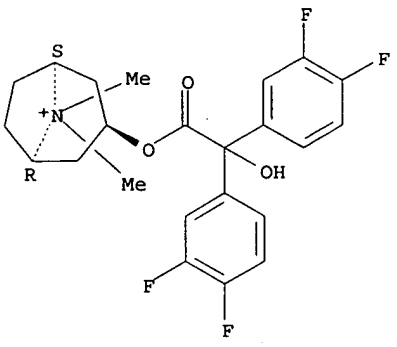
● Br^-

RN 412030-83-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[[bis(3,4-difluorophenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



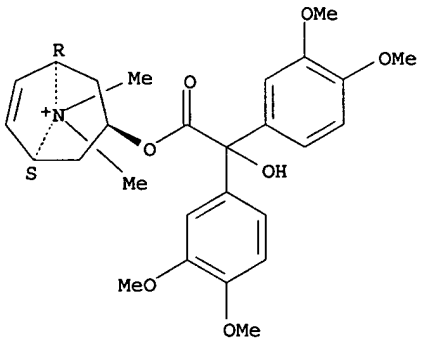
Br^-



● Br^-

RN 412030-84-3 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(3,4-dimethoxyphenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

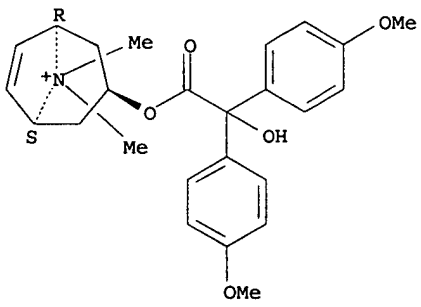
Absolute stereochemistry.



● Br^-

RN 412030-85-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[hydroxybis(4-methoxyphenyl)acetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

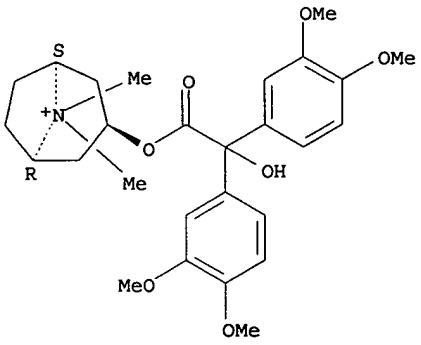
Absolute stereochemistry.



Br^-

RN 412030-86-5 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[[bis(3,4-dimethoxyphenyl)hydroxyacetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

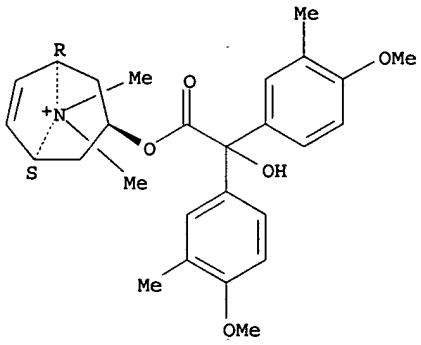
Absolute stereochemistry.



● Br^-

RN 412030-87-6 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[hydroxybis(4-methoxy-3-methylphenyl)acetyl]oxy]-8,8-dimethyl-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

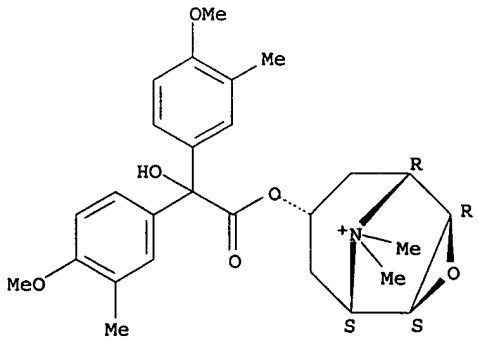
Absolute stereochemistry.



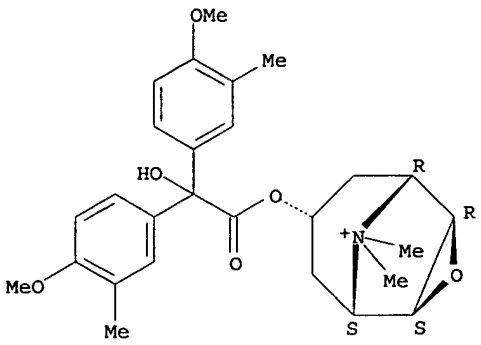
● Br^-

RN 412030-88-7 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[[hydroxybis(4-methoxy-3-methylphenyl)acetyl]oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



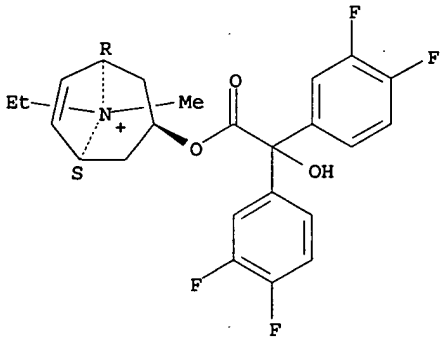
Br^-



● Br^-

RN 412030-89-8 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[[bis(3,4-difluorophenyl)hydroxyacetyl]oxy]-8-ethyl-8-methyl-, bromide, (3-endo,8-anti)- (9CI) (CA INDEX NAME)

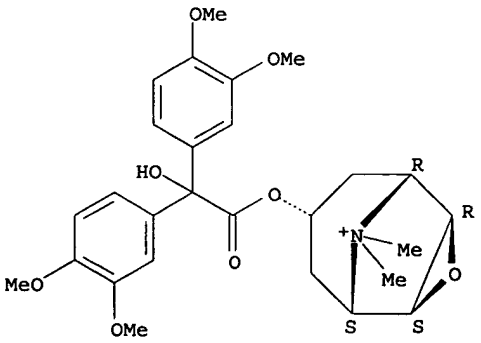
Absolute stereochemistry.



● Br^-

RN 412032-24-7 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[[bis(3,4-dimethoxyphenyl)hydroxyacetyl]oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



Br^-

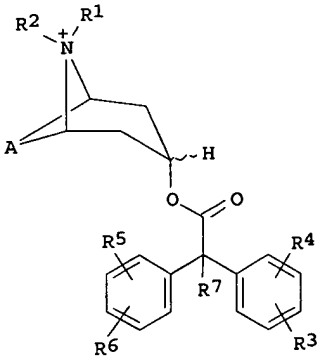
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2002:291677 CAPLUS
DN 136:325718
TI Procedures for the production of new anticholinergic alkaloids as well as for their use in medicines
IN Meissner, Helmut; Morschhaeuser, Gerd; Pieper, Helmut; Pohl, Gerald; Reichl, Richard; Speck, Georg; Banholzer, Rolf
PA Boehringer Ingelheim Pharma K.-G., Germany
SO Ger. Offen., 16 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

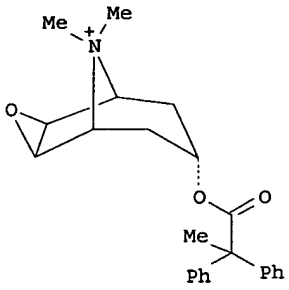
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10050994	A1	20020418	DE 2000-10050994	20001014
	WO 2002032899	A1	20020425	WO 2001-EP11226	20010928

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2000-10050994 A 20001014
OS CASREACT 136:325718; MARPAT 136:325718
GI



I



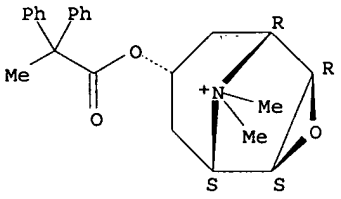
II

AB The present invention concerns new anticholinergics I.cntdot.X- [A = CH2CH2, CH:CH, oxirane-2,3-diyl; X- = simple anion; R1, R2 = C1-4-alkyl, C1-4-hydroxyalkyl, C1-4-haloalkyl; R3 - R6 = H, C1-4-alkyl, C1-4-alkoxy, OH, CF3, CN, NO2, halogen; R7 = H, C1-4-alkyl, C1-4-alkyloxy, C1-4-haloalkylene, C1-4-haloalkoxy, C1-4-hydroxyalkylene, CF3, C1-4-alkylene- C1-4-alkoxy, OC(:O)-, C1-4-alkyl, OC(:O)-, C1-4-haloalkyl, OC(:O)CF3, halogen] and their physiol. acceptable salts, procedures for their prodn. as well as their use as drugs. Thus, scopine ester II.cntdot.Br- was prepd. from Ph2CMeCO2H via acyl chloride formation with (COCl)2 in CH2Cl2 contg. catalytic Me2NCHO, esterification with scopine in CH2Cl2, and quaternization with MeBr in MeCN/CH2Cl2. Pharmaceutical formulations for use as tablets, in ampuls, in aerosols, in soln. and as inhalants are presented.

IT **412046-80-1P**, 2,2-Diphenylpropionic acid scopine ester methobromide **412046-81-2P**, 2-Fluoro-2,2-diphenylacetic acid scopine ester methobromide **412046-82-3P**, 2,2-Diphenylpropionic acid tropenol ester methobromide
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of new quaternary alkaloids as anticholinergic agents)

RN 412046-80-1 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 9,9-dimethyl-7-(1-oxo-2,2-diphenylpropoxy)-, bromide, (1.alpha.,2.alpha.,4.alpha.,5.alpha.,7.beta.)-(9CI) (CA INDEX NAME)

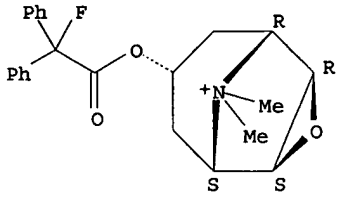
Relative stereochemistry.



● Br^-

RN 412046-81-2 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[(fluorodiphenylacetyl)oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.alpha.,4.alpha.,5.alpha.,7.beta.)-(9CI) (CA INDEX NAME)

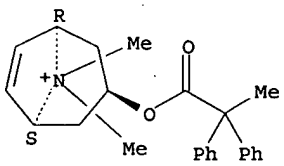
Relative stereochemistry.



● Br^-

RN 412046-82-3 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 8,8-dimethyl-3-(1-oxo-2,2-diphenylpropoxy)-, bromide, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2001:137173 CAPLUS
DN 134:178396
TI Synthesis, activity and formulations of pharmaceutical compounds for treatment of oxidative stress and/or endothelial dysfunction
IN Del Soldato, Piero
PA Nicox S.A., Fr.
SO PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001012584	A2	20010222	WO 2000-EP7225	20000727

W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG,

MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 2000013264	A	20020416	BR 2000-13264	20000727
NO 2002000623	A	20020409	NO 2002-623	20020208
PRAI IT 1999-MI1817	A	19990812		
WO 2000-EP7225	W	20000727		

OS MARPAT 134:178396

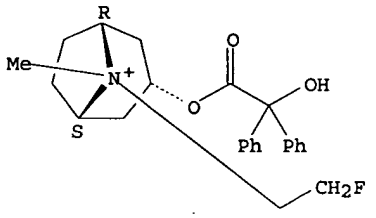
AB Compds. or their salts of general formula (I): A-B-N(O)s wherein: s is an integer equal to 1 or 2; A = R-T1-, wherein R is the drug radical and T1 = (CO)t or (X)t', wherein X = O, S, NR1c, R1c is H or a linear or branched alkyl or a free valence, t and t' are integers and equal to zero or 1, with the proviso that t = 1 when t' = 0; t = 0 when t' = 1; B = -TB -X2-O- wherein TB = (CO) when t = 0, TB = X when t' = 0, X being as above defined; X2, bivalent radical, is such that the precursor drug of A and the precursor of B meet resp. the pharmacol. tests described in the description. Synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction are disclosed. The precursors are such as to meet the pharmacol. test reported in the description.

IT **63516-07-4**, Flutropium bromide
RL: RCT (Reactant); RACT (Reactant or reagent)
(bronchodilator; synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction)

RN 63516-07-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L9 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2000:742057 CAPLUS

DN 133:309791

TI Synthesis, activity and formulations of pharmaceutical compounds for treatment of oxidative stress and/or endothelial dysfunction

IN Del Soldato, Piero

PA Nicox S.A., Fr.

SO PCT Int. Appl., 140 pp.
CODEN: PIXXD2

DT **Patent**

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000061541	A2	20001019	WO 2000-EP3239	20000411
WO 2000061541	A3	20010927		

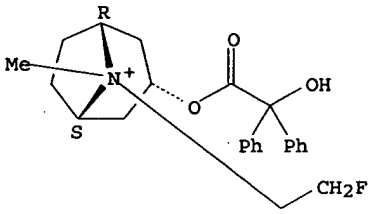
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, DM, EE, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

IT 1311923	B1	20020320	IT 1999-MI752	19990413
BR 2000009703	A	20020108	BR 2000-9703	20000411
EP 1169298	A2	20020109	EP 2000-926870	20000411

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO
NO 2001004928 A 20011213 NO 2001-4928 20011010
PRAI IT 1999-MI752 A 19990413
WO 2000-EP3239 W 20000411
OS MARPAT 133:309791
AB Synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction are disclosed. The precursors are such as to meet the pharmacol. test reported in the description.
IT **63516-07-4**, Flutropium bromide
RL: RCT (Reactant); RACT (Reactant or reagent)
(bronchodilator; synthesis, activity and formulations of pharmaceutical compds. for treatment of oxidative stress and/or endothelial dysfunction)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L9 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 1998:724154 CAPLUS
DN 130:43383
TI Pharmaceutical compositions containing cholinergic antagonists and ketotifen or epinastine for hypersecretion of airway
IN Okudaira, Ichiro; Sumida, Kenji
PA Taisho Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

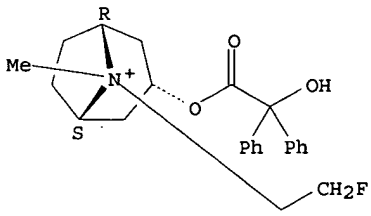
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10298107	A2	19981110	JP 1997-109334	19970425

AB The compns. contg. (a) cholinergic antagonists and (b) ketotifen, epinastine, and/or their salts are useful for suppressing hypersecretion of airway, e.g. nasal mucus, in cold, allergic rhinitis, etc. Oral administration of an aq. soln. contg. total belladonna alkaloids and ketotifen fumarate to rats strongly inhibited airway secretion.
IT **216587-35-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(airway hypersecretion inhibitors contg. cholinergic antagonists and ketotifen or epinastine)
RN 216587-35-8 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)-, mixt. with 4,9-dihydro-4-(1-methyl-4-piperidinylidene)-10H-benzo[4,5]cyclohepta[1,2-b]thiophen-10-one (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 63516-07-4
CMF C24 H29 F N O3 . Br
CDES 2:ENDO,SYN

Relative stereochemistry.

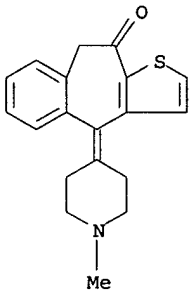


CM 2

CRN 34580-14-8
CMF C19 H19 N O S . C4 H4 O4

CM 3

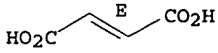
CRN 34580-13-7
CMF C19 H19 N O S



CM 4

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.



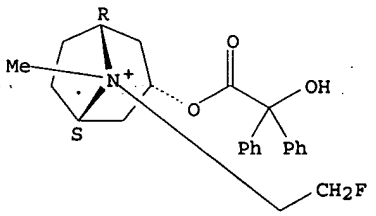
L9 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 1993:434333 CAPLUS
DN 119:34333
TI Antitussive and expectorant compositions containing anticholinergics
IN Takeda, Nobuo
PA ND New Drug Development Institute Inc., Japan
SO Can. Pat. Appl., 16 pp.
CODEN: CPXXEB
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CA 2076114	AA	19930228	CA 1992-2076114	19920813
PRAI JP 1991-205502		19910827		

AB An inhalation-type antitussive and expectorant compn. comprises a quaternary ammonium-type anticholine compd., preferably flutropium bromide (I). An inhalant with a quant. propellant dispenser (30 .mu.g I/spout) contained I fine powder 0.05, soybean lecithin 0.1, and Freon 12/Freon 11 (70/30) 100 parts.

IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(antitussive and expectorant inhalants contg.)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

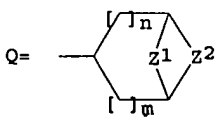


● Br^-

L9 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 1993:428006 CAPLUS
DN 119:28006
TI Preparation of tropanyl methobromide esters and analogs as anticholinergics
IN Banholzer, Rolf; Bauer, Rudolf; Reichl, Richard
PA Boehringer Ingelheim KG, Germany
SO Ger. Offen., 21 pp.
CODEN: GWXXBX
DT **Patent**
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4108393	A1	19920917	DE 1991-4108393	19910315
	CA 2105575	AA	19920916	CA 1992-2105575	19920305
	WO 9216528	A1	19921001	WO 1992-EP489	19920305
	W: AU, CA, CS, FI, HU, JP, KR, NO, PL, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	AU 9213457	A1	19921021	AU 1992-13457	19920305
	AU 662128	B2	19950824		
	EP 579615	A1	19940126	EP 1992-905643	19920305
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	HU 65132	A2	19940428	HU 1993-2611	19920305
	JP 06505718	T2	19940630	JP 1992-505496	19920305
	CZ 281509	B6	19961016	CZ 1993-1917	19920305
	PL 179673	B1	20001031	PL 1992-300630	19920305
	SK 281511	B6	20010409	SK 1993-949	19920305
	AT 202778	E	20010715	AT 1992-905643	19920305
	ES 2160577	T3	20011116	ES 1992-905643	19920305
	ZA 9201875	A	19930913	ZA 1992-1875	19920313
	IL 101225	A1	19960514	IL 1992-101225	19920313
	NO 9303274	A	19931112	NO 1993-3274	19930914
	US 5654314	A	19970805	US 1995-412407	19950328
	US 5770738	A	19980623	US 1995-412408	19950328
PRAI	DE 1991-4108393	A	19910315		
	WO 1992-EP489	A	19920305		
	US 1993-117199	B1	19931202		

OS MARPAT 119:28006
GI



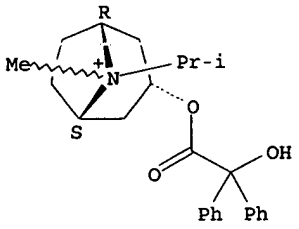
AB ZCO2A [A = bicyclic group Q; Z = CR1R2R3; R1 = H, OH, CH2OH, alkyl,

alkoxy; R2, R3 = Ph, thienyl, furyl, pyridyl, (cyclo)alkyl, etc.; CR2R3 = annelated cycloalkyl or heterocyclyl; Z1 = CH2, NR, etc.; R = (halo)alkyl, hydroxyalkyl; Z2 = (CH2)2-3, CH:CH, 2,3-oxiranediyl, etc.; m = 0-2; n = 1, 2; m + n = .ltoreq. 3] were prepd. as anticholinergics (no data). Thus, ClCPh2COCl was condensed with scopine and the product condensed with MeBr to give benzilic acid scopine ester methobromide.

IT **103672-12-4P 106885-67-0P 116083-53-5P**
145616-73-5P 145616-74-6P 145616-76-8P
145616-77-9P 145616-78-0P 145616-96-2P
145617-01-2P 145680-80-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as anticholinergic)

RN 103672-12-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8-methyl-8-(1-methylethyl)-, bromide, endo- (9CI) (CA INDEX NAME)

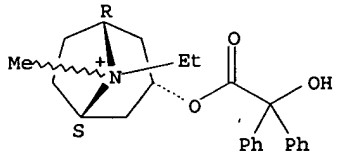
Relative stereochemistry.



● Br^-

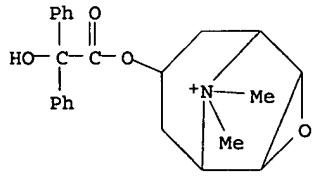
RN 106885-67-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



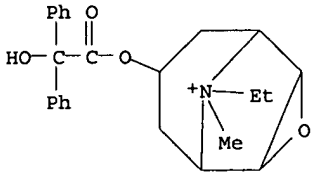
● Br^-

RN 116083-53-5 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[(hydroxydiphenylacetyl)oxy]-9,9-dimethyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.alpha.)- (9CI) (CA INDEX NAME)



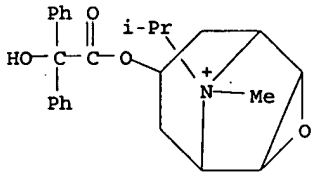
Br^-

RN 145616-73-5 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 9-ethyl-7-[(hydroxydiphenylacetyl)oxy]-9-methyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)



● Br^-

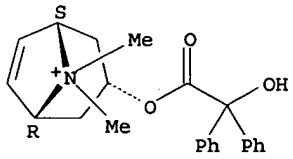
RN 145616-74-6 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 7-[(hydroxydiphenylacetyl)oxy]-9-methyl-9-(1-methylethyl)-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)



● Br^-

RN 145616-76-8 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, bromide, endo- (9CI) (CA INDEX NAME)

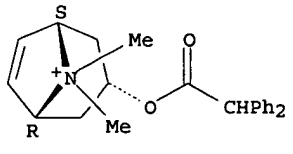
Relative stereochemistry.



● Br^-

RN 145616-77-9 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[(diphenylacetyl)oxy]-8,8-dimethyl-, bromide, endo- (9CI) (CA INDEX NAME)

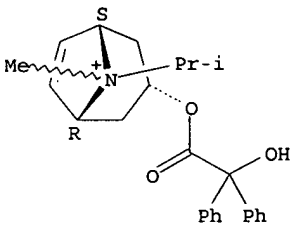
Relative stereochemistry.



● Br^-

RN 145616-78-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]oct-6-ene, 3-[(hydroxydiphenylacetyl)oxy]-8-methyl-8-(1-methylethyl)-, bromide, endo- (9CI) (CA INDEX NAME)

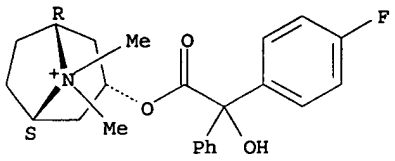
Relative stereochemistry.



● Br^-

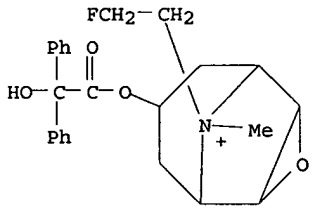
RN 145616-96-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[[(4-fluorophenyl)hydroxyphenylacetyl]oxy]-8,8-dimethyl-, bromide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

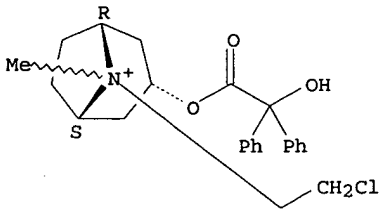
RN 145617-01-2 CAPLUS
CN 3-Oxa-9-azoniatricyclo[3.3.1.02,4]nonane, 9-(2-fluoroethyl)-7-[(hydroxydiphenylacetyl)oxy]-9-methyl-, bromide, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)- (9CI) (CA INDEX NAME)



● Br^-

RN 145680-80-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-chloroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



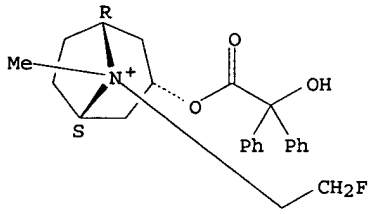
● Br^-

L9 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 1993:154616 CAPLUS
DN 118:154616
TI Antitussive and expectorant compositions containing anticholinergics
IN Takeda, Nobuko
PA ND New Drug Development Institute Inc., Japan
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 529484	A1	19930303	EP 1992-114085	19920818
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 05058911	A2	19930309	JP 1991-215502	19910827
PRAI JP 1991-215502		19910827		

AB An antitussive and expectorant inhalant comprises a quaternary ammonium-type anticholine compd., preferably flutropium bromide (I). The compn. exhibits very low toxicity, suppresses coughing, and improves difficulty in expectoration. I powder (0.05 part) having a particle size of .ltoreq. 10 .mu.m and 0.1 part soybean lecithin were placed in a pressure vessel and 100 parts of a propellant (Freon 12/Freon 11 = 70/30) was charged into the vessel under pressure. The content was cooled below -50.degree. and filled into an Al container, then a quant. propellant dispenser, 30 .mu.g I per spout, was fitted to the container.
IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(inhalation-type antitussive and expectorant compn. contg.)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L9 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 1992:28142 CAPLUS
DN 116:28142
TI Heptafluoropropane propellant for drug aerosols
IN Weil, Hans Hermann; Daab, Ottfried
PA Boehringer Ingelheim K.-G., Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX

DT **Patent**
LA German
FAN.CNT 1

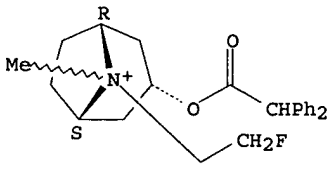
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4003270	A1	19910808	DE 1990-4003270	19900203
	CA 2075060	AA	19910804	CA 1991-2075060	19910131
	WO 9111496	A1	19910808	WO 1991-EP178	19910131
	W: AU, CA, FI, HU, JP, KR, NO, PL, SU, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9172116	A1	19910821	AU 1991-72116	19910131
	AU 656129	B2	19950127		
	EP 513099	A1	19921119	EP 1991-903267	19910131
	EP 513099	B1	19991013		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	HU 62455	A2	19930528	HU 1992-2508	19910131
	HU 218664	B	20001028		
	JP 05504350	T2	19930708	JP 1991-503687	19910131
	RU 2118170	C1	19980827	RU 1991-5052884	19910131
	AT 185587	E	19991015	AT 1991-903267	19910131
	ES 2139574	T3	20000216	ES 1991-903267	19910131
	ZA 9100756	A	19921028	ZA 1991-756	19910201
	CZ 285209	B6	19990616	CZ 1991-265	19910204
	SK 281440	B6	20010312	SK 1991-265	19910204
	NO 9203040	A	19920731	NO 1992-3040	19920731
	FI 9203491	A	19920803	FI 1992-3491	19920803
	US 2002071812	A1	20020613	US 2002-72400	20020206
PRAI	DE 1990-4003270	A	19900203		
	WO 1991-EP178	A	19910131		
	US 2000-525431	A3	20000314		

AB TG 227 (1,1,1,2,3,3,3-heptafluoropropane) is a propellant for aerosol drug sprays. TG 227 is environmentally safer than the conventional chlorofluorohydrocarbons. TG 227 can be used together with known propellants. A formulation comprised fenoterol 0.3, lecithin 0.1, TG 227 69.6, and FCCl3 30.0%.

IT **138220-97-0**
RL: BIOL (Biological study)
(aerosol sprays of, heptafluoropropane propellant in)

RN 138220-97-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(diphenylacetyl)oxy]-8-(2-fluoroethyl)-8-methyl-, bromide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br⁻

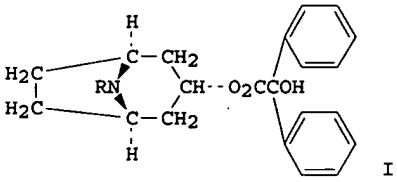
10

L9 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 1977:601855 CAPLUS
DN 87:201855
TI Quaternary N-.beta.-substituted benzylic acid N-alkyltropinic esters
IN Banholzer, Rolf; Bauer, Rudolf; Heusner, Alex; Schulz, Werner
PA Boehringer, C. H., Sohn, Ger.
SO Ger. Offen., 25 pp.
CODEN: GWXXBX
DT **Patent**
LA German
FAN.CNT 1

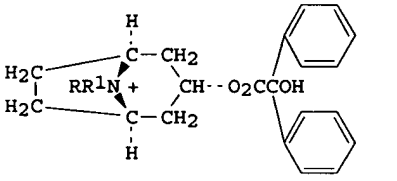
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2540633	A1	19770428	DE 1975-2540633	19750912
	DE 2540633	C2	19890119		
	AT 353428	B	19791112	AT 1976-6186	19760820
	AT 7606186	A	19790415		
	US 4042700	A	19770816	US 1976-720245	19760903
	FI 7602590	A	19770313	FI 1976-2590	19760909

	FI 62083	B	19820730		
	FI 62083	C	19821110		
	FR 2323387	A1	19770408	FR 1976-27151	19760909
	FR 2323387	B1	19801010		
	CH 621349	A	19810130	CH 1976-11455	19760909
	BE 846104	A1	19770310	BE 1976-170555	19760910
	SE 7610070	A	19770313	SE 1976-10070	19760910
	SE 428472	B	19830704		
	SE 428472	C	19831013		
	DK 7604115	A	19770313	DK 1976-4115	19760910
	DK 142988	B	19810309		
	DK 142988	C	19811012		
	NO 7603109	A	19770315	NO 1976-3109	19760910
	NO 145199	B	19811026		
	NO 145199	C	19820203		
	NL 7610063	A	19770315	NL 1976-10063	19760910
	NL 187210	B	19910201		
	NL 187210	C	19910701		
	JP 52036693	A2	19770322	JP 1976-108667	19760910
	JP 61052155	B4	19861112		
	ZA 7605426	A	19780530	ZA 1976-5426	19760910
	AU 506286	B2	19791220	AU 1976-17629	19760910
	ES 451467	A1	19771101	ES 1976-451467	19760911
	CA 1079733	A1	19800617	CA 1976-261037	19760913
	JP 62005983	A2	19870112	JP 1986-142449	19860618
	JP 62033232	B4	19870720		
PRAI	DE 1975-2540633		19750912		

GI



I



II

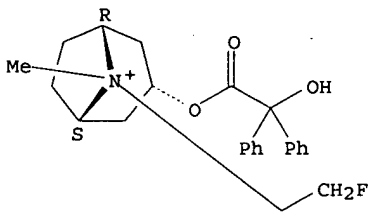
AB Title esters I (R = CH2CH2F, Et, Me, Bu, CH2CH2OH, CH2CH2Cl) and/or their hydrochlorides were prepd. by alkylation of I (R = H) with alkyl bromides. I were quaternized by treatment with R1Br to II (R = same, R1 = Me, Et, Bu, etc.), which have spasmolytic properties (no data). Stereoisomers of II were obtained when R and R1 were reversed; e.g., I (R = Me) treated with FCH2CH2Br gave II (R : Me, R1 = CH2CH2F), which was a stereoisomer of the product obtained by treating I (R = CH2CH2F) with MeBr.

IT **63516-07-4P 63516-08-5P 63516-09-6P**
63516-10-9P 63516-11-0P 63516-13-2P
63516-17-6P 63516-18-7P 63516-19-8P
63516-20-1P 63516-21-2P 63516-22-3P
63516-23-4P 63516-24-5P 63516-25-6P
63516-26-7P 63537-42-8P 63541-98-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 63516-07-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

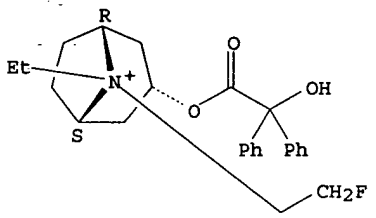
Relative stereochemistry.



● Br^-

RN 63516-08-5 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

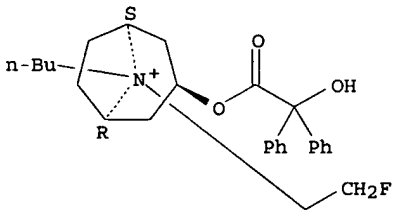
Relative stereochemistry.



● Br^-

RN 63516-09-6 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

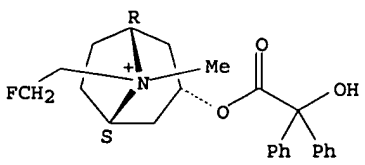
Relative stereochemistry.



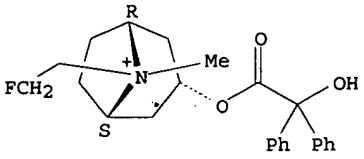
● Br^-

RN 63516-10-9 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



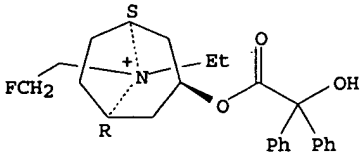
● Br^-



● Br^-

RN 63516-11-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

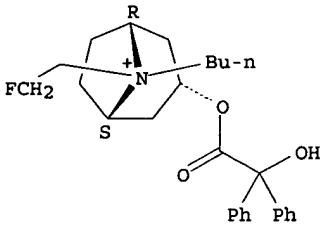
Relative stereochemistry.



● Br^-

RN 63516-13-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

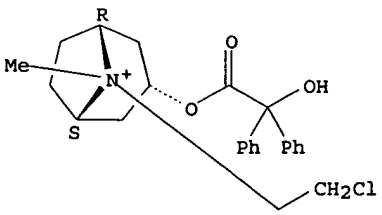
Relative stereochemistry.



● Br^-

RN 63516-17-6 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-chloroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

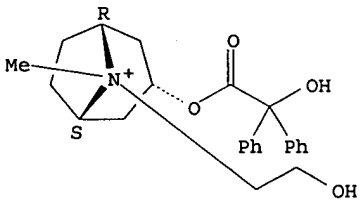
Relative stereochemistry.



● Br^-

RN 63516-18-7 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8-(2-hydroxyethyl)-8-methyl-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

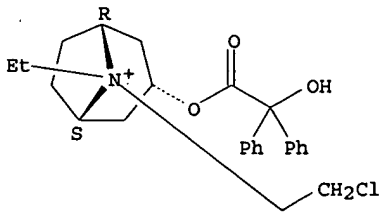
Relative stereochemistry.



● Br^-

RN 63516-19-8 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-chloroethyl)-8-ethyl-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

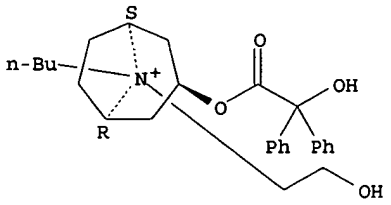
Relative stereochemistry.



● Br^-

RN 63516-20-1 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-3-[(hydroxydiphenylacetyl)oxy]-8-(2-hydroxyethyl)-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

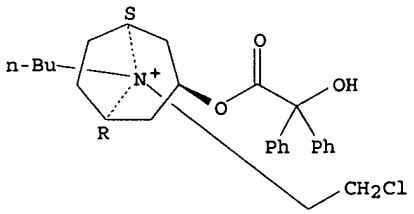
Relative stereochemistry.



● Br^-

RN 63516-21-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-8-(2-chloroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

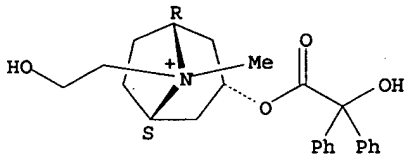
Relative stereochemistry.



● Br^-

RN 63516-22-3 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8-(2-hydroxyethyl)-8-methyl-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

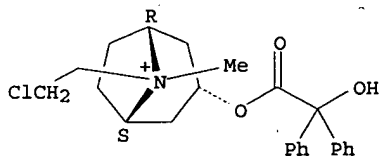
Relative stereochemistry.



● Br^-

RN 63516-23-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-chloroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

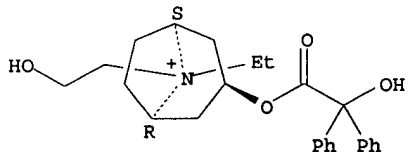
Relative stereochemistry.



● Br^-

RN 63516-24-5 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-3-[(hydroxydiphenylacetyl)oxy]-8-(2-hydroxyethyl)-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

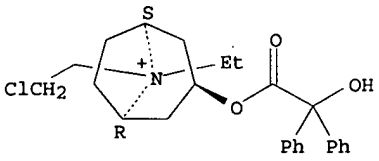
Relative stereochemistry.



Br^-

RN 63516-25-6 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-chloroethyl)-8-ethyl-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

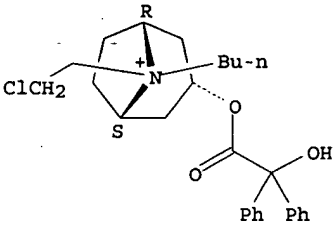
Relative stereochemistry.



● Br^-

RN 63516-26-7 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-8-(2-chloroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

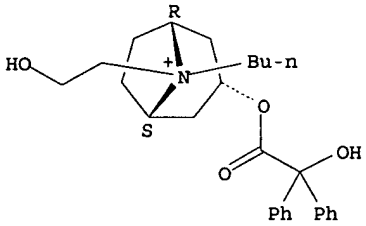
Relative stereochemistry.



● Br^-

RN 63537-42-8 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-3-[(hydroxydiphenylacetyl)oxy]-8-(2-hydroxyethyl)-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

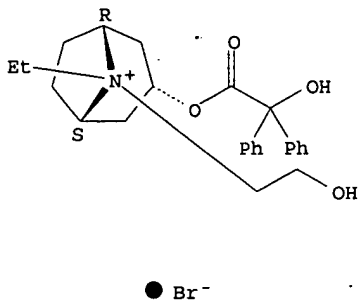
Relative stereochemistry.



● Br^-

RN 63541-98-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-3-[(hydroxydiphenylacetyl)oxy]-8-(2-hydroxyethyl)-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



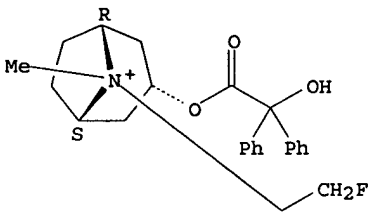
● Br^-

09/976950

=> d 1-39 bib abs hitstr

L12 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 2000:813574 CAPLUS
DN 134:33062
TI Rapid separation of basic drugs by nonaqueous capillary electrophoresis
AU Cherkaoui, S.; Geiser, L.; Veuthey, J.-L.
CS Laboratory of Pharmaceutical Analytical Chemistry, University of Geneva, Geneva, 1211/4, Switz.
SO Chromatographia (2000), 52(7/8), 403-407
CODEN: CHRGB7; ISSN: 0009-5893
PB Friedrich Vieweg & Sohn Verlagsgesellschaft mbH
DT Journal
LA English
AB Nonaq. capillary electrophoresis (NACE) has been used to achieve rapid sepns. of basic drugs. A high elec. field was obtained by using short capillaries. Baseline sepns. of basic drugs, including amphetamines, tropane alkaloids and local anesthetics, were achieved in 1 min by selection of the appropriate org. solvent and electrolyte compn. Thus, high-throughput analyses can be performed. Peak efficiency up to 9154 theor. plates s-1 was achieved in a sepn. performed at 923 V cm-1. No discernible loss in resoln. was obsd. when a conventional capillary (64.5 cm) was replaced by a short (32.5 cm) capillary.
IT **63516-07-4**, Flutropium bromide
RL: ANT (Analyte); ANST (Analytical study)
(rapid sepn. of basic drugs by nonaq. capillary electrophoresis)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



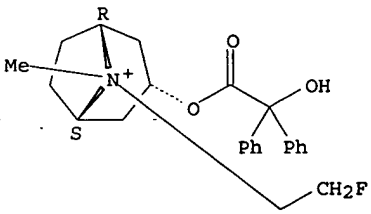
● Br^-

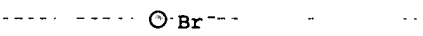
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1999:608141 CAPLUS
DN 131:356209
TI Nonaqueous versus aqueous capillary electrophoresis for the dosage of N-butylscopolamine in various pharmaceutical formulations
AU Cherkaoui, Samir; Mateus, Lidia; Christen, Philippe; Veuthey, Jean-Luc
CS Laboratory of Pharmaceutical Analytical Chemistry, University of Geneva, Geneva, 1211, Switz.
SO Journal of Pharmaceutical and Biomedical Analysis (1999), 21(1), 165-174
CODEN: JPBADA; ISSN: 0731-7085
PB Elsevier Science B.V.
DT Journal
LA English
AB A simple nonaq. capillary electrophoresis method is described for the sepn. of several atropine and scopolamine related drugs (ipratropium Br, oxitropium Br, flutropium Br, scopolamine HCl, N-butylscopolamine Br, apoatropine, atropine sulfate, littorine). The anal. was performed in a methanol-acetonitrile (25/75) mixt. contg. 25 mM ammonium acetate and 1 M acetic acid. The robustness was proved using a full factorial design at 2 levels. The method was validated and applied to the detn. of N-butylscopolamine in different pharmaceutical prepns. (Buscopan tablet, injection, suppository). The results were compared to data obtained by capillary electrophoresis in aq. media.
IT **63516-07-4**, Flutropium bromide
RL: ANT (Analyte); ANST (Analytical study)
(atropine and scopolamine related drugs detn. by nonaq. vs. aq.

capillary electrophoresis and assay of N-butylscopolamine pharmaceutical forms)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

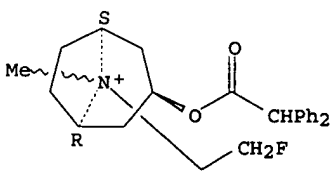




RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1999:62160 CAPLUS
DN 130:130052
TI Capillary electrophoresis for the analysis of tropane alkaloids: pharmaceutical and phytochemical applications
AU Mateus, L.; Cherkaoui, S.; Christen, P.; Veuthey, J.-L.
CS Laboratory of Pharmnaceutical Analytical Chemistry, University of Geneva, Geneva, 1211, Switz.
SO Journal of Pharmaceutical and Biomedical Analysis (1998), 18(4,5), 815-825
CODEN: JPBADA; ISSN: 0731-7085
PB Elsevier Science B.V.
DT Journal
LA English
AB Three capillary electrophoresis methods, using UV detection, were developed for the simultaneous detn. of several tropane alkaloids, including atropine, scopolamine and synthetic derivs. After optimization, the validated capillary zone electrophoresis methods were applied to the detn. of these compds. in various pharmaceutical forms, such as ophthalmic and injection solns., tablets, suppositories and aerosols. Capillary electrophoresis in the micellar mode was found to be more appropriate for the anal. of hyoscyamine and scopolamine in plant material. These two compds. are generally found together with other tropane alkaloids which present similar structures and charge to mass ratio. Furthermore, the sepn. of positional isomers, such as hyoscyamine and littorine generally encountered in plant exts., was also considered. The developed method was applied to the anal. of hairy root exts. of Datura candida x Datura aurea, Datura quercifolia and Hyoscyamus albus.
IT **219826-55-8**
RL: ANT (Analyte); ANST (Analytical study)
(detn. of tropane alkaloids by capillary electrophoresis)
RN 219826-55-8 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(diphenylacetyl)oxy]-8-(2-fluoroethyl)-8-methyl-, (3-endo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

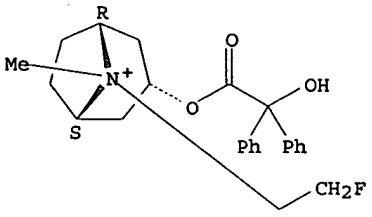


RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2002 ACS

AN 1999:59974 CAPLUS
DN 130:187252
TI Validated capillary electrophoresis method for the determination of atropine and scopolamine derivatives in pharmaceutical formulations
AU Cherkaoui, Samir; Mateus, Lidia; Christen, Philippe; Veuthey, Jean-Luc
CS Laboratory of Pharmaceutical Analytical Chemistry, University of Geneva, Geneva, 1211, Switz.
SO Journal of Pharmaceutical and Biomedical Analysis (1998), 17(6,7), 1167-1176
CODEN: JPBADA; ISSN: 0731-7085
PB Elsevier Science B.V.
DT Journal
LA English
AB The simultaneous detn. of atropine and scopolamine derivs., which have similar structures, was investigated by using capillary zone electrophoresis. The effects of buffer pH, buffer concn. and hydroxypropyl-.beta.-cyclodextrin concn. on migration time and resoln. of the investigated compds. were systematically studied. The selected electrophoretic buffer consisted of a 80 mM sodium citrate pH 2.5, contg. 2.5 mM hydroxypropyl-.beta.-cyclodextrin as the complexing agent. Quant. anal. was validated by testing the reproducibility of the method, giving a relative std. deviation less than 1 and 2% for the intermediate precision of migration times and peak area ratios, resp. The linearity of the method was assessed between 50 and 150% of the theor. content (coeff. of correlation greater than 0.99). The proposed method was suitable and accurate for the detn. of these basic drugs in pharmaceuticals.
IT **63516-07-4**, Flutropium bromide
RL: ANT (Analyte); ANST (Analytical study)
(capillary electrophoresis for detn. of atropine and scopolamine derivs. in pharmaceuticals)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1997:108107 CAPLUS
DN 126:207135
TI Pharmacological studies of 1-(p-chlorophenyl)propanol and 2-(1-hydroxy-3-butenyl)phenol: two new non-narcotic analgesics designed by molecular connectivity
AU Garcia-March, F. J.; Garcia-Domenech, R.; Galvez, J.; Anton-Fos, G. M.; de Julian-Ortiz, J. V.; Giner-Pons, R.; Recio-Iglesias, M. C.
CS Unidad Investigacion Diseno Farmacos Conectividad Molecular, Valencia, Spain
SO Journal of Pharmacy and Pharmacology (1997), 49(1), 10-15
CODEN: JPPMAB; ISSN: 0022-3573
PB Royal Pharmaceutical Society of Great Britain
DT Journal
LA English
AB Mol. topol. has been applied to the design of new analgesic drugs. Linear discriminant anal. and connectivity functions were used to design two potentially suitable drugs which were synthesized and tested for analgesic properties by the acetic acid-induced abdominal constriction test in mice and the tail-flick test in rats. In mice, the compd. 1-(p-chlorophenyl)propanol showed higher analgesic activity, both i.p. and orally, then acetylsalicylic acid. 2-(1-Hydroxy-3-butenyl)phenol

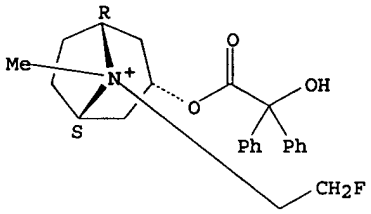
exhibited a lesser protective effect (70% of that shown by acetylsalicylic acid). In rats, acetylsalicylic acid gave the greatest protection against pain when administered i.p., while 1-(p-chlorophenyl)propanol was the most active orally. The 2-(1-hydroxy-3-butenyl)phenol, both i.p. and orally, showed the least protective effect. These results demonstrated the peripheral analgesic properties of the selected compds., thus confirming the validity of the mol. design method.

IT **63516-07-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacol. studies of (p-chlorophenyl)propanol and (1-hydroxybutenyl)phenol as two new non-narcotic analgesics designed by mol. connectivity)

RN 63516-07-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L12 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2002 ACS

AN 1992:503851 CAPLUS

DN 117:103851

TI Mechanism of nasal secretion mediated via nerve reflex in guinea pigs and evaluation of antiallergic drugs

AU Namimatsu, Akio; Go, Koichiro; Tanimoto, Hideji; Okuda, Minoru

CS Inst. Bio-Act. Sci., Nippon Zoki Pharm. Co., Hyogo, 673-14, Japan

SO Int. Arch. Allergy Immunol. (1992), 97(2), 139-45
CODEN: IAAIEG; ISSN: 1018-2438

DT Journal

LA English

AB In order to confirm the mechanism of nasal secretion mediated via a nerve reflex in guinea pigs, the secretory response from the contralateral side induced by local application of various stimulators was studied. There was no difference in the nasal secretion between the contralateral and the stimulated sides when the secretion was induced by allergen, histamine, and capsaicin at lower doses. Methacholine caused a nasal secretion only on the stimulated side. Pretreatment with local anesthetic and ganglionic blockers blocked the secretory response bilaterally which was induced by allergen, histamine, and capsaicin. Antihistaminics also blocked the secretory response induced by allergen and histamine on both sides, but not the capsaicin-induced nasal secretion. Unilateral pretreatment with local anticholinergics prevented all secretory responses only on the stimulated side. Thus, exogenous and endogenous histamine released by the allergen-antibody reaction may stimulate histamine H1 receptors located in the sensory nerve endings as trigger, resulting in the secretory response mediated via a nerve reflex, while methacholine may act directly on nasal glands. Ketotifen and azelastine, which are chem. mediators releasing inhibitor with antihistaminergic activity, prevented the nasal secretion induced by histamine and allergen. On the other hand, disodium cromoglycate, amlexanox, and tranilast had only a slight effect on the allergen-induced nasal secretion. The secretory response on the contralateral side induced by various stimulators would be useful in the in vivo evaluation of antiallergic drugs to demonstrate the difference in their modes of action.

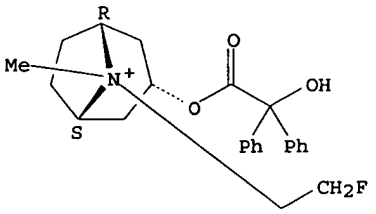
IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(nasal secretion mediation by nerve reflex response to)

RN 63516-07-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-

[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

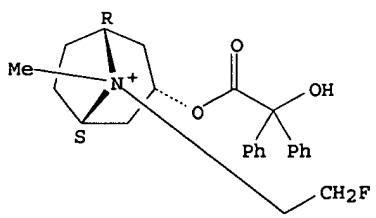
Relative stereochemistry.



● Br^-

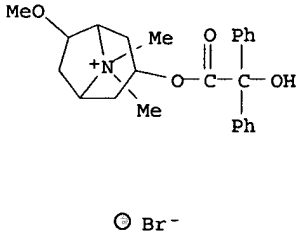
L12 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1991:441690 CAPLUS
DN 115:41690
TI Effects of muscarinic antagonists on experimental nasal secretion in guinea pigs
AU Mizuno, Hiroyuki; Iwase, Nobuhisa; Kawamura, Yutaka; Ohno, Hiromitsu; Hosokawa, Tomokazu; Kasuya, Yutaka
CS Cent. Res. Lab., SS Pharm. Co., Ltd., Narita, 286, Japan
SO Jpn. J. Pharmacol. (1991), 55(4), 531-7
CODEN: JJPAAZ; ISSN: 0021-5198
DT Journal
LA English
AB The effects of muscarinic antagonists on acetylcholine (ACh)- and histamine-induced nasal secretion were investigated in guinea pigs. Inhalations of flutropium (0.01 to 0.3%) and atropine (0.03 to 0.3%) into the nasal cavities dose-dependently inhibited the nasal secretion induced by ACh. The inhibitory action of flutropium was slightly stronger than that of atropine. Inhalations of pirenzepine (0.3%) and gallamine (0.3%) had no effect on the ACh-induced nasal secretion. However, 4-diphenylacetoxy-N-methylpiperidine metiodide (4-DAMP) dose-dependently inhibited the nasal secretion induced by ACh. Inhalations of flutropium (0.3%) and diphenhydramine (0.3%) showed a similar inhibitory action on the histamine-induced nasal secretion. These results suggest that 1) inhalation into the nasal cavities of flutropium was effective in exptl. model of ACh- and nasal cavities of flutropium was effective in exptl. model of ACh- and histamine-induced nasal secretion, 2) M3- cholinergic receptors may be dominant in the nasal secretion induced by ACh and 3) the exptl. model of drug-induced nasal secretion in guinea pigs used in the present study can be employed to develop therapeutic drugs for nasal secretion.
IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(nose secretion response to)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L12 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1991:243816 CAPLUS
DN 114:243816
TI A study of the inhibition of adrenaline-induced vasoconstriction in the isolated perfused liver of rabbit
AU Martinkova, Jirina; Bulas, Josef; Krejci, Vladimir; Hartman, Miroslav; Tilser, Ivan; Hulek, Petr
CS Med. Fac., Charles Univ., Hradec Kralove, 500 38, Czech.
SO Hepatology (Baltimore) (1990), 12(5), 1157-65
CODEN: HPTLD9; ISSN: 0270-9139
DT Journal
LA English
AB The action of a series of vasoactive and antispasmodic agents on the intrahepatic vasoconstriction induced by adrenaline was studied in the isolated perfused liver of rabbits. The arterial and portal venous resistance, oxygen consumption, liver wt., and bile flow were investigated. The drugs used were as follows: nonspecific .alpha.-adrenergic antagonists (DH-ergocristine, dibenamine, phenoxybenzamine), vasodilators with a direct misc. action (theophylline, papaverine, dipyridamole, glucagon, Aiu-cor by Instituto Gentilli, Italy [inosine, ATP, IPT, UTP]), and antispasmodics (piperylone, tropenziline, noraminophenazone). Adrenaline increased arterial and portal venous resistance followed by a diminution of oxygen consumption, liver wt., and bile flow. .alpha.-Adrenergic antagonists inhibited the effects of adrenaline on portal venous resistance and oxygen consumption and esp. the effects on hepatic arterial resistance. The most potent agent was phenoxybenzamine. In contrast to .alpha.-adrenoceptor blockade, the effects of other vasoactive agents were without a sustained influence on hepatic arterial resistance (excepting those of glucagon and dipyridamole). Some of them were effective an antagonists on responses in the portal venous bed (papaverine, Aiu-cor). Moreover, there were drugs exerting an enhancement of the vasoconstrictor responses of hepatic artery to low concns. of adrenaline with no effect on the portal venous bed (piperylone, tropenziline). Theophylline and noraminophenazone exerted no effect either on the arterial or portal venous bed. No vasodilator agent antagonized the changes of the bile flow after adrenaline administration.
IT **143-92-0**
RL: ANST (Analytical study)
(adrenaline-induced vasoconstriction in isolated perfused liver response to)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



⊙ Br^-

L12 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1991:221127 CAPLUS
DN 114:221127
TI Effects of flutropium on experimental models of drug- and allergy-induced rhinitis in guinea pigs
AU Mizuno, Hiroyuki; Kawamura, Yutaka; Iwase, Nobuhisa; Ohno, Hiromitsu
CS Cent. Res. Lab. SS, Pharm. Co., Ltd., Narita, 286, Japan
SO Jpn. J. Pharmacol. (1991), 55(3), 321-8
CODEN: JJPAAZ; ISSN: 0021-5198
DT Journal
LA English
AB The effects of flutropium on histamine (Hist)-induced increase in intranasal pressure in non-sensitized guinea pigs and nasal mucosa capillary permeability in passively sensitized guinea pigs were investigated. Flutropium (0.3%), atropine(0.3%), diphenhydramine (0.01%) and cimetidine (0.1%) were directly inhaled into the nasal cavities by an ultrasonic nebulizer for 20 min, followed by inhalation of Hist (0.1%) for 10 min. Flutropium, atropine and diphenhydramine had an inhibitory action on the Hist-induced increase in intranasal pressure in guinea pigs.

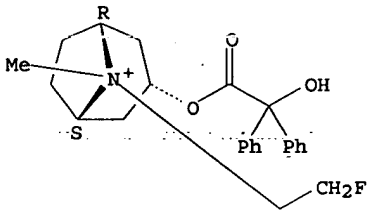
Cimetidine had no effect on this system. In passively sensitized guinea pigs (the challenge was performed 48 h after sensitization), a 0.1-1.0 mg/kg injection of flutropium (i.v.) dose-dependently inhibited the allergic nasal mucosa capillary permeability. Atropine (10 mg/kg, i.v.) had no inhibitory action on this system. These results suggest that inhalation into the nasal cavities and i.v. injection of flutropium are effective in exptl. models of drug- and allergy-induced rhinitis of the guinea pig.

IT **63516-07-4**
RL: BIOL (Biological study)
(drug- and allergy-induced rhinitis therapy with)

RN 63516-07-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L12 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2002 ACS

AN 1990:132206 CAPLUS

DN 112:132206

TI Effects of flutropium bromide, a new antiasthma drug, alone or in combination with salbutamol, aminophylline and disodium cromoglycate on acetylcholine-induced bronchoconstriction

AU Mizuno, Hiroyuki; Takahashi, Yoshinori; Ohno, Hiromitsu; Misawa, Miwa

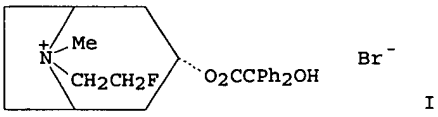
CS Cent. Res. Lab., SS Pharm. Co., Ltd., Narita, 286, Japan

SO Nippon Yakurigaku Zasshi (1990), 95(1), 31-40
CODEN: NYKZAU; ISSN: 0015-5691

DT Journal

LA Japanese

GI



I

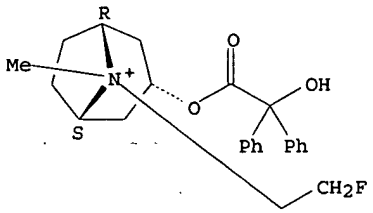
AB Fluotropin bromide (I) is a bronchodilator with anticholinergic action. A single inhalation of I (0.0003%) into the airways of guinea pigs inhibited the acetylcholine (ACh) (i.v.)-induced broncoconstriction without changing the decrease in blood pressure induced by ACh. When salbutamol (3 .mu.g/Kg, i.v.), aminophylline (5 mg/Kg, i.v.), or di-Na cromoglycate (10 mg/Kg, i.v.) were administered in combination with I (0.0003%), bronchodilation was enhanced as compared with administration of the antiasthma drugs alone.

IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(acetylcholine-induced bronchoconstriction response to salbutamol and aminophylline and cromoglycate in combination with)

RN 63516-07-4 CAPLUS

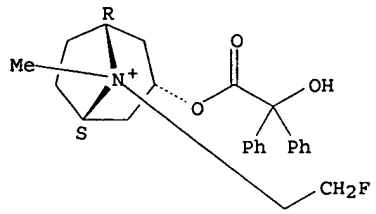
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L12 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1989:433460 CAPLUS
DN 111:33460
TI Effects of flutropium bromide, a new antiasthma drug, after repeated administration on bronchmotor response and hepatic drug metabolizing enzymes
AU Mizuno, Hiroyuki; Kawabata, Nobuo; Ohno, Hiromitsu; Misawa, Miwa
CS Cent. Res. Lab., SS Pharm Co., Ltd., Narita, 286, Japan
SO Nippon Yakurigaku Zasshi (1989), 93(6), 333-40
CODEN: NYKZAU; ISSN: 0015-5691
DT Journal
LA Japanese
AB Single inhalation of 0.03% flutropium bromide (I) inhibited the acetylcholine (ACh)-induced bronchoconstriction without changing the fall in blood pressure induced by ACh in guinea pigs. Inhalation of 0.03% I for 5 min daily for periods of 14 and 28 days caused bronchodilatory effects similar to that after single inhalation. Repeated inhalation of I for 28 days produced no change in body wt. in guinea pigs. In addn., I did not change the hepatic drug metabolizing enzyme activities in rats at 0.5 mg/kg/day i.v. for 2-14 days. Apparently, tolerance does not develop after repeated administration of I. A cumulative effect after repeated inhalation of I was also not obsd.
IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(bronchodilation by and liver drug-metabolizing enzyme response to, tolerance in relation to)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L12 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1989:2496 CAPLUS
DN 110:2496
TI Ambivalent character of the effect of antimuscarinics in chlorophos-induced poisoning
AU Kosmachev, A. B.; Kosmacheva, I. M.; Chigareva, S. M.
CS Inst. Toxicol., Leningrad, 193019, USSR
SO Farmakol. Toksikol. (Moscow) (1988), 51(5), 86-9
CODEN: FATOAO; ISSN: 0014-8318
DT Journal
LA Russian

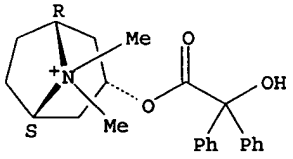
AB Differences were seen in the effects of antimuscarinics on the outcome of poisonings in rats induced by direct and indirect cholinomimetics. Doses of the agents possessing equal choline-blocking activity provided different levels of protection against chlorophos-induced poisoning but not against carbacholine-induced poisoning. The differences between the action against poisoning from direct and indirect cholinomimetics were used to formulate a hypothesis about the ambivalent character of the action of antimuscarinics. The hypothesis implies that the protective activity of the agents after poisoning by organophosphate compds. is detd. by the ratio of the effects on pre- and postsynaptic cholinergic receptors.

IT **21735-94-4**
RL: BIOL (Biological study)
(poisoning by chlorophos response to)

RN 21735-94-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● I^-

L12 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2002 ACS

AN 1988:161194 CAPLUS

DN 108:161194

TI The influence of pretreatment with neurotropic and myotropic vasodilators on the effect of epinephrine in isolated rabbit liver. II. Pretreatment with phenoxybenzamine, papaverine, and Palerol

AU Tilser, Ivan; Martinkova, Jirina; Macek, Karel

CS Lek. Fak., Univ. Karlova, Hradec Kralove, Czech.

SO Sb. Ved. Pr. Lek. Fak. Univ. Karlovy Hradci Kralove (1987), 30(Suppl. 4), 513-26
CODEN: SVLKAO; ISSN: 0049-5514

DT Journal

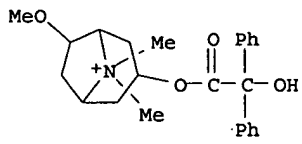
LA Czech

AB The protective effects of combined treatments with the neurotropic and myotropic vasodilators phenoxybenzamine (I) and papaverine (II), resp., and Palerol (III) on isolated rabbit livers perfused with 10-100 mM adrenaline were studied as a means of organ protection from catecholamine-induced ischemic damage during transplantations. Adrenaline increased perfusion resistance and decreased O consumption and bile prodn. Pretreatment with II or III had only minimal effect, while I dose-dependently reduced the adrenaline effects. Combinations of I (0.4 and 2 mg/L) with II (3 mg/L) or III (250 .mu.L/L) nearly completely eliminated the adverse effects of adrenaline.

IT **143-92-0**
RL: BIOL (Biological study)
(liver ischemia from epinephrine redn. by phenoxybenzamine and, transplantation in relation to)

RN 143-92-0 CAPLUS

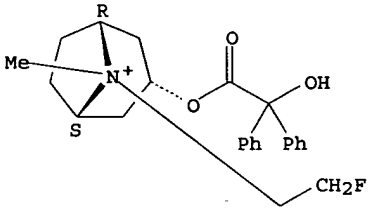
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

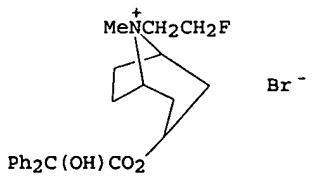
L12 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1988:124202 CAPLUS
DN 108:124202
TI Effects of flutropium bromide, a new antiasthma drug, on mediator release from mast cells and actions of mediators
AU Misawa, Miwa; Yanaura, Saizo; Hosokawa, Tomokazu; Mizuno, Hiroyuki; Irinoda, Kazuhiko; Takahashi, Yoshinori; Yoshimura, Keiji; Maruyama, Youko; Sugimoto, Kiyomi; et al.
CS Sch. Pharm., Hoshi Univ., Tokyo, 142, Japan
SO Nippon Yakurigaku Zasshi (1988), 91(2), 97-103
CODEN: NYKZAU; ISSN: 0015-5691
DT Journal
LA Japanese
AB Flutropium bromide (3 or 10 mg/kg, i.v.) inhibited passive cutaneous anaphylaxis in guinea pigs, whereas atropine did not. Flutropium bromide also inhibited histamine release from isolated rat mast cells stimulated by antigen, but was weaker in this respect than disodium cromoglycate. Neither flutropium bromide nor atropine antagonized leukotriene D4-induced contraction of isolated guinea pig tracheal smooth muscles, and flutropium bromide did not antagonize serotonin-induced bronchoconstriction in dogs.
IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(airway constriction and mast cell histamine release inhibition by)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L12 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1987:534528 CAPLUS
DN 107:134528
TI Synthesis of the bronchospasmolytic agent flutropium bromide and of some homologous and configuration isomeric compounds
AU Banholzer, R.; Pook, K. H.; Stiasni, M.
CS Dep. Med. Chem., Boehringer Ingelheim K.-G., Ingelheim/Rhein, D-6507, Fed. Rep. Ger.
SO Arzneim.-Forsch. (1986), 36(8), 1161-6
CODEN: ARZNAD; ISSN: 0004-4172
DT Journal
LA English
GI



I

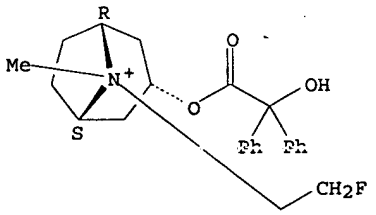
AB N-(.beta.-Fluoroalkyl substituted) benzilic acid nortropine esters, e.g. flutropium bromide I, were prepd. via benzilic acid imidazolide and the nortropine. The quaternization takes place with sufficiently high stereoselectivity to give configuration isomers which differ in

physico-chem. properties and pharmacol. activity.

IT **63516-07-4P 63516-08-5P 63516-09-6P**
63516-10-9P 63516-11-0P 63516-13-2P
110411-50-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

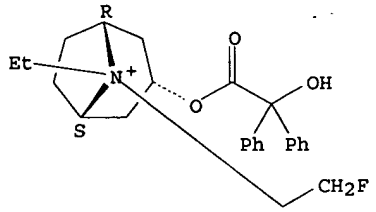
Relative stereochemistry.



● Br^-

RN 63516-08-5 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

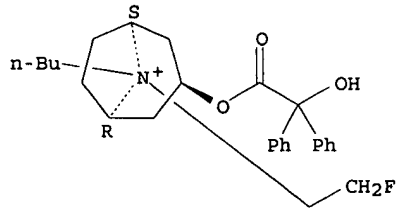
Relative stereochemistry.



● Br^-

RN 63516-09-6 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

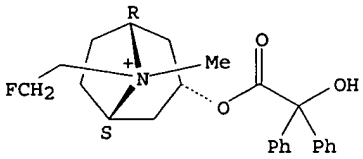
Relative stereochemistry.



● Br^-

RN 63516-10-9 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

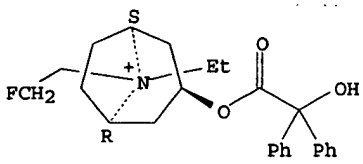
Relative stereochemistry.



● Br^-

RN 63516-11-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-ethyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

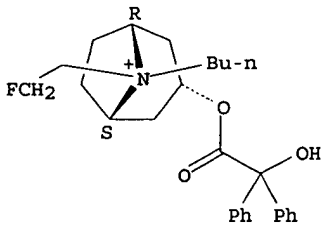
Relative stereochemistry.



● Br^-

RN 63516-13-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-, bromide, (endo,anti)- (9CI) (CA INDEX NAME)

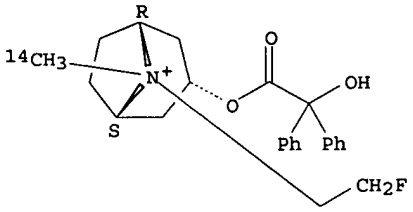
Relative stereochemistry.



● Br^-

RN 110411-50-2 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-(methyl-14C)-, bromide, (endo,syn)- (9CI) (CA INDEX NAME)

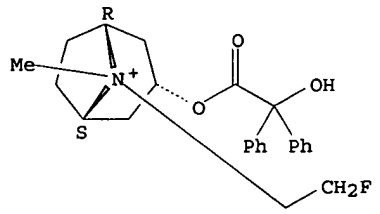
Relative stereochemistry.



O Br^-

L12 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1987:526882 CAPLUS
DN 107:126882
TI Effects of flutropium bromide (Ba598Br), a new antiasthmatic drug, on parasympathetically innervated organs
AU Misawa, Miwa; Mizuno, Hiroyuki; Hosokawa, Tomokazu; Yanaura, Saizo
CS Sch. Pharm., Hoshi Univ., Tokyo, 142, Japan
SO Oyo Yakuri (1987), 33(5), 715-21
CODEN: OYYAA2; ISSN: 0369-8033
DT Journal
LA Japanese
AB When inhaled at high concns. of .ltoreq.1.0%, neither flutropium bromide nor atropine had any effect on the heart rate or blood pressure in pentobarbital-anesthetized, or the heart rate in conscious, dogs. When injected i.v. into anesthetized dogs at 1 and 3 mg/kg, flutropium bromide decreased the heart rate, whereas atropine accelerated it slightly. When injected i.v. (.gtoreq.1 mg/kg) both drugs lowered the blood pressure dose dependently. Flutropium bromide and atropine (1 .mu.g/kg, i.v.) inhibited the increased heart rate and the lowered blood pressure induced by acetylcholine (1 .mu.g/kg, i.v.); in this respect, the 2 drugs were equally active. Flutropium bromide inhalation (0.3%) inhibited the increase in salivary secretion caused by stimulation of the chorda tympani; the rate of onset of action was slower for flutropium bromide than for atropine. However, the extent of the maximal inhibition was essentially the same for the 2 drugs. Inhalation of either drug (1.0%) slightly inhibited contraction of the urinary bladder provoked by elec. stimulation of the pelvic nerve. I.v. administration (1 mg/kg, i.v.) of either drug inhibited bladder contraction. Inhalation of flutropium bromide had only a slight or no effect on organs receiving parasympathetic innervation.
IT **63516-07-4**, Flutropium bromide
RL: BIOL (Biological study)
(parasympathetic nervous system-regulated organ function response to)
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



Br^-

L12 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1987:417197 CAPLUS
DN 107:17197
TI Studies on the fate of 8-(2-fluoroethyl)-3.alpha.-hydroxy-

1.alpha.H,5.alpha.H-tropanium bromide benzilate (Ba598Br). II. Absorption, distribution, excretion and metabolism in rats

AU Yoshimura, Keiji; Sugiyama, Seiyu; Ohtsuki, Toshiharu; Mitsugi, Koichi; Kimura, Ryohei

CS Cent. Res. Lab., SS Pharm. Co., Ltd., Chiba, 286, Japan

SO Iyakuhin Kenkyu (1987), 18(2), 240-51
CODEN: IYKEDH

DT Journal

LA Japanese

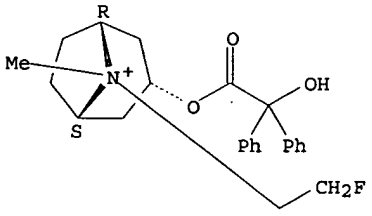
AB Absorption, distribution, excretion and metab. of 8-(2-fluoroethyl)-3.alpha.-hydroxy-1.alpha.H, 5.alpha.H-tropaniumbromide benzilate (Ba598Br) were studied in rats after oral and i.v. administration of 14C-Ba598Br. After oral administration, absorption from the gastrointestinal tract was small. The radioactivity in blood following i.v. administration was eliminated in a biphasic process with half-lives of 1.16 h and 17.05 h, resp. The amts. of radioactivity excreted in urine and feces during 168 h were 1.6% and 94.% after oral administration, and 49.5% and 45.8% after i.v. administration, resp. The autoradiograms showed higher radioactivity after i.v. administration in the gastrointestinal contents, intestinal mucosa, liver, kidney, brown fat, salivary gland, and nasal mucosa. A similar distribution pattern was obsd. after oral administration. The radioactivity was rapidly excreted in bile after i.v. administration, and amounted to 33.2% of the administered radioactivity within 72 h. About 4% of the radioactivity was recovered in the bile within 72 h after intraduodenal administration of the pooled bile collected from other rats to which 14C-Ba598Br had been administered i.v. Unchanged Ba598Br in urine accounted for 9.3% and 63.3% of the urinary excretion after oral and i.v. administration, resp.

IT **63516-07-4**, Ba 598Br
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(metab. and pharmacokinetics of)

RN 63516-07-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L12 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2002 ACS

AN 1987:137706 CAPLUS

DN 106:137706

TI Molecular and crystal structure of flutropium bromide

AU Kiel, G.

CS Inst. Anorg. Chem., Johannes Gutenberg-Univ., Mainz, D-6500/1, Fed. Rep. Ger.

SO Arzneim.-Forsch. (1986), 36(8), 1166-8
CODEN: ARZNAD; ISSN: 0004-4172

DT Journal

LA English

AB X-ray structural anal. of the title compd. proves the configuration at the N-atom at which the synthesis pathway was aimed: the Et fluoride group has an axial position in relation to the piperidine ring. This is also the case for the ester group. The piperidine ring is in a chain form and the pyrrolidine ring has an envelope conformation. The seven membered carbon ring can thus only have a boat conformation.

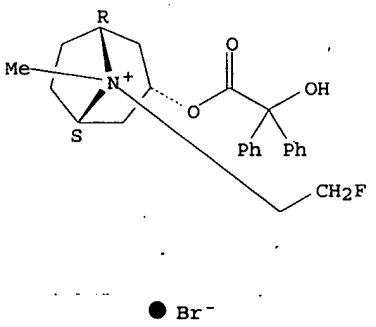
IT **63516-07-4**, Flutropium bromide
RL: PRP (Properties)
(crystallog. of)

RN 63516-07-4 CAPLUS

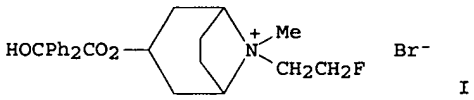
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI)

(CA INDEX NAME)

Relative stereochemistry.



L12 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1986:603001 CAPLUS
DN 105:203001
TI Pharmacology of the anticholinergic bronchospasmolytic agent flutropium bromide
AU Bauer, R.; Fuegner, A.
CS Dep. Pharmacol., Boehringer Ingelheim K.-G., Ingelheim/Rhein, D-6507, Fed. Rep. Ger.
SO Arzneim.-Forsch. (1986), 36(9), 1348-52
CODEN: ARZNAD; ISSN: 0004-4172
DT Journal
LA English
GI



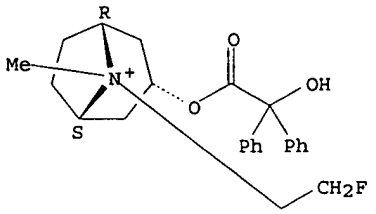
I

AB Flutropium bromide (I) [63516-07-4], a quaternary benzylic tropine ester, when tested in vivo and in vitro demonstrated potent anticholinergic effects, which largely corresponded to the classic pharmacol. activity pattern of atropine. The anticholinergic potency of I in isolated guinea pig prepns. exceeded the effectiveness of atropine by a factor of 1.6. I did not have a papaverine-like effect and its antihistaminic activity was only 1/100 of that obsd. with diphenylhydramine and its antiallergic activity was 1/3 of that obsd. with cromoglycate. After parenteral administration of I to lab. animals, its mydriatic effect as well as its inhibitory effects on salivary secretion and gastric secretion exceeded the efficacy of atropine. Because its quaternary structure, I is poorly absorbed by the gastrointestinal tract after enteral administration and, in contrast to atropine, it does not cause any central anticholinergic effects. The bronchospasmolytic effect of I in dogs after its i.v. administration was only slightly greater than obsd. with i.v. atropine, but its duration of action was much longer. As an aerosol, the bronchospasmolytic effect of I was more effective than atropine by a factor of 2; its duration of action was about 4 times as long. The therapeutic-side effect ratio for I was calcd. and copmpared to that of atropine.

IT **63516-07-4**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(bronchospasmolytic and anticholinergic activity and toxicity of)

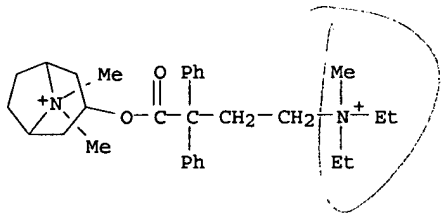
RN 63516-07-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 8-(2-fluoroethyl)-3-[(hydroxydiphenylacetyl)oxy]-8-methyl-, bromide, (3-endo,8-syn)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● Br^-

L12 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1986:590868 CAPLUS
DN 105:190868
TI Synthesis of tri-substituted acetates
AU Lu, Binqian; Wen, Guangling
CS Inst. Pharmacol. Toxicol., Acad. Mil. Med. Sci., Beijing, Peop. Rep. China
SO Yaoxue Xuebao (1985), 20(10), 772-7
CODEN: YHHPAL; ISSN: 0513-4870
DT Journal
LA Chinese
AB Twelve substituted .alpha.-phenyl-.alpha.-2-diethylaminoethylacetates, RPhC(CH2CH2NEt2)CO2R1 (I, R = Ph, cyclopentyl; R1 = 2-diisopropylaminoethyl, 2-morpholinoethyl, 2-piperidinoethyl, 4-N-methylpiperidinyl, 3-quinuclidinyl, 3-tropanyl), were prepd. by the substitution of RPhCHCO2Me with Et2NCH2CH2Cl, followed by transesterification with R1OH. In preliminary test, I (R = Ph, R1 = 4-N-methylpiperidinyl; R = cyclopentyl, R1 = 3-quinuclidinyl) showed marked analgesic activities.
IT **103676-74-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and analgesic activity of)
RN 103676-74-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[4-(diethylmethylammonio)-1-oxo-2,2-diphenylbutoxy]-8,8-dimethyl-, diiodide (9CI) (CA INDEX NAME)



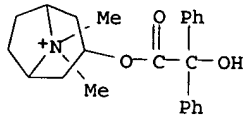
●2 I^-

L12 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1986:14498 CAPLUS
DN 104:14498
TI Structure-activity relationships in a series of muscarinic antagonists: four modes of antagonist-receptor binding
AU Tropsha, A. E.; Nizhnii, S. V.; Yaguzhinskii, L. S.
CS A. N. Belozerskii Lab. Mol. Biol. Bioorg. Chem., M. V. Lomonosov Moscow State Univ., Moscow, USSR
SO Bioorg. Khim. (1985), 11(10), 1402-16
CODEN: BIKHD7
DT Journal
LA Russian
AB The data available in literature on structure-activity relationships among 230 muscarinic antagonists have been analyzed. Three groups of ammonium compds. are distinguished, each contg. a specific chem. structure element. For the antagonist assocn. with the receptor, the binding-const. logarithms within each group depend linearly on the partition-coeff. (.pi.) logarithms characterizing their distribution in a water-octanol system. The linear regression coeffs. for .pi. in each group are practically identical. A 4th group consists of antagonists that have no ammonium grouping. Four possible modes of antagonist-receptor binding are

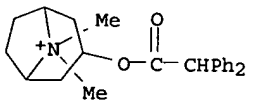
discussed.

IT **21735-67-1 99546-09-5**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(muscarinic parasympatholytic activity of, structure in relation to)

RN 21735-67-1 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl- (9CI) (CA INDEX NAME)



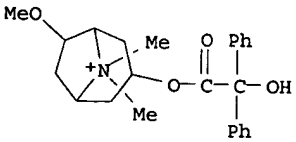
RN 99546-09-5 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(diphenylacetyl)oxy]-8,8-dimethyl- (9CI) (CA INDEX NAME)



L12 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1984:29446 CAPLUS
DN 100:29446
TI About the possibility of influencing circulatory disturbances in the vascular bed of the liver
AU Martinkova, J.; Skaunic, V.; Hulek, P.; Hartman, M.
CS Med. Fac., Charles Univ., Hradec Kralove, Czech.
SO Czech. Med. (1983), 6(3), 185-6
CODEN: CZMED2; ISSN: 0139-9179
DT Journal
LA English
AB The possibility of influencing posttransplantation liver circulatory disturbances is discussed. Ischemia was induced in isolated perfused livers with catecholamines. Certain .alpha.-sympatholytics antagonized the effects of the catecholamine on vascular bed resistance and O consumption by the liver. However, there was no effect on vol. of excreted bile. In contrast, certain vasodilators antagonized the bile excretion but not vascular resistance.

IT **143-92-0**
RL: BIOL (Biological study)
(liver ischemia response to, posttransplantation circulation disorder in relation to)

RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

L12 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1984:17459 CAPLUS
DN 100:17459
TI Effects of 8-(2-fluoroethyl)-3.alpha.-hydroxy-1.alpha.H,5.alpha.H-tropanium bromide benzilate (Ba598Br) on allergy- and drug-induced asthmas
AU Yanaura, Saizo; Mizuno, Hiroyuki; Goto, Kazuhiro; Kamei, Junzo; Hosokawa, Tomokazu; Ohtani, Koukichi; Misawa, Miwa
CS Sch. Pharm., Hoshi Univ., Tokyo, 142, Japan
SO Jpn. J. Pharmacol. (1983), 33(5), 971-82

increased the resistance of vascular beds of the hepatic artery and portal vein, and decreased O consumption, bile flow, and total wt. Pretreatment with papaverine, glucagon, and Palerol inhibited the effect of I on portal blood vessels but increased the sensitivity of arterial vessels to I. Theophylline increased the sensitivity of the arterial bed to I but had no effect on portal circulation. Nucleotides (Aiu-cor) and dipyridamol, on the other hand, slightly protected the hepatic artery and had no effect of the I response. Vasodilators inhibited the I-induced decrease in bile flow. Results are discussed in relation to liver transplantation.

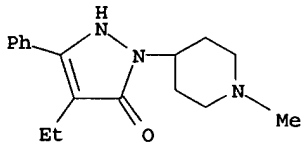
IT **81478-34-4**
RL: BIOL (Biological study)
(liver ischemia from adrenaline response to)

RN 81478-34-4 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide, mixt. with 1,2-dihydro-1,5-dimethyl-4-(methylamino)-2-phenyl-3H-pyrazol-3-one and 4-ethyl-1,2-dihydro-2-(1-methyl-4-piperidinyl)-5-phenyl-3H-pyrazol-3-one (9CI) (CA INDEX NAME)

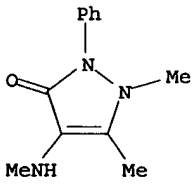
CM 1

CRN 2531-04-6
CMF C17 H23 N3 O



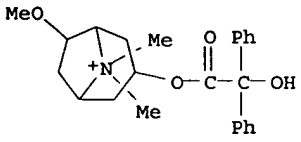
CM 2

CRN 519-98-2
CMF C12 H15 N3 O



CM 3

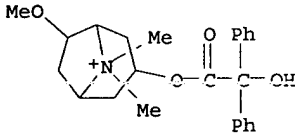
CRN 143-92-0
CMF C24 H30 N O4 . Br



● Br^-

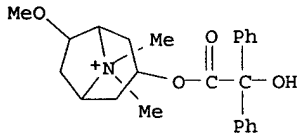
L12 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1979:551116 CAPLUS
DN 91:151116
TI Adsorption of anticholinergic drugs by antacids
AU Sunam, Gultekin; Ekinci, Ahmet C.
CS Eczacilik Fak., Istanbul Univ., Istanbul, Turk.
SO Eczacilik Bul. (1979), 21(2), 24-8
CODEN: ECBUAN; ISSN: 0367-0236
DT Journal

LA Turkish
AB The anticholinergic effect of adiphenine-HCl [50-42-0], oxyphenonium bromide [50-10-2], and tropenzilium bromide [**143-92-0**] on contraction of isolated guinea pig ileum induced by acetylcholine, was decreased by kaolin, NaAl(OH)2CO3, and Al(OH)3. Bismuth carbonate did not affect the activity of the last 2 anticholinergics. Apparently, antacids administered with anticholinergics may decrease the anticholinergic effect.
IT **143-92-0**
RL: BIOL (Biological study)
(intestine contraction response to, antacid effect on)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

L12 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1979:61322 CAPLUS
DN 90:61322
TI Indirect micromethods for determining derivatives of aryl- and diarylhydroxyacetic acids in the ultraviolet. III. Determination of N-alkylheterocyclic esters of diphenylhydroxyacetic acid
AU Zyzynski, Wlodzimierz
CS Phys. Chem. Lab., Inst. Drug Res. Control, Warsaw, Pol.
SO Acta Pol. Pharm. (1978), 35(3), 321-7
CODEN: APPHAX; ISSN: 0001-6837
DT Journal
LA Polish
AB Benzilic acid esters (0.1-0.5-mg samples) were hydrolyzed with 0.1N KOH, the acid formed oxidized with N-bromosuccinimide (40 mg/10 mL) in 0.01N KOH to Ph2CO, and the latter detd. spectroscopically at 248 nm. Reproducible and accurate results were obtained for pharmaceutical prepns. contg. tropine benzilate [69038-96-6], tropenziline bromide [**143-92-0**], poldine Me sulfate [545-80-2], benzilonium bromide [1050-48-2], pipenzolate bromide [125-51-9], and clidinium bromide [3485-62-9] (in presence of chlordiazepoxide). The method was recommended for detn. of the drugs in body fluids.
IT **143-92-0**
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, indirect spectrometric)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)

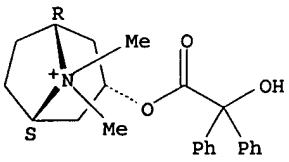


● Br^-

L12 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1977:37455 CAPLUS
DN 86:37455
TI The kinetics of competitive antagonists on guinea-pig ileum
AU Roberts, Fiona; Stephenson, R. P.
CS Dep. Pharmacol., Univ. Edinburgh, Edinburgh, Scot.
SO Br. J. Pharmacol. (1976), 58(1), 57-70

CODEN: BJPCBM
DT Journal
LA English
AB The kinetics of the antagonistic action of mepyramine maleate [59-33-6], atropine sulfate [55-48-1], lachesine [1164-38-1], benziloyltropine methyliodide [**21735-94-4**], pentyltriethyl ammonium iodide [21735-95-5], and antazoline-HCl [2508-72-7] on guinea pig isolated ileum were not consistent with the predictions of the interaction-limited model described by W. D. M. Paton (1961). The apparent dissocn. rate const. calcd. from the decrease in occupancy on washout was not independent of the concn. of antagonist; the dissocn. rate const. of a 'slow' antagonist calcd. from the change in occupancy when a 'fast' antagonist was superimposed varied with the concn. of fast antagonist; if the concn. of slow antagonist was increased when the fast antagonist was superimposed so that the equil. occupancy of the 'slow' was the same as before, a transitional phase was obsd.
IT **21735-94-4**
RL: BIOL (Biological study)
(ileum receptor interaction with, kinetics of)
RN 21735-94-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

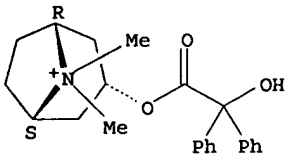
Relative stereochemistry.



● I⁻

L12 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1976:553757 CAPLUS
DN 85:153757
TI The use of different agonists in antagonist affinity constant estimations
AU Roberts, F.; Stephenson, R. P.
CS Dep. Pharmacol., Univ. Edinburgh, Edinburgh, Scot.
SO Br. J. Pharmacol. (1976), 57(3), 395-8
CODEN: BJPCBM
DT Journal
LA English
AB The apparent affinities of 4 muscarinic antagonists (e.g. lachesine [1164-38-1]) in intact pieces of guinea pig ileum were sightly but consistently higher when estd. from the responses produced by pentyltrimethylammonium iodide [19109-66-1] than when estd. from the responses produced by carbachol [51-83-2]. The difference was reduced or abolished when totally denervated longitudinal muscle strips were used, suggesting that the difference was due to the presence of receptors in the ganglionic layer. These receptors must differ from the muscarinic receptors on the smooth muscle and also can not be nicotinic ganglionic receptors because the difference was unaffected by the presence or absence of hexamethonium bromide.
IT **21735-94-4**
RL: BIOL (Biological study)
(muscarinic antagonist activity of, in ileum, ganglionic layer receptors in relation to)
RN 21735-94-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

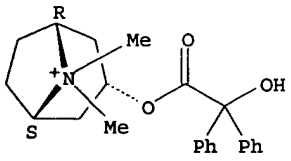
Relative stereochemistry.



● I^-

L12 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1975:51425 CAPLUS
DN 82:51425
TI Simultaneous action of two competitive antagonists
AU Ginsborg, B. L.; Stephenson, R. P.
CS Dep. Pharmacol., Univ. Edinburgh, Edinburgh, Scot.
SO Br. J. Pharmacol. (1974), 51(2), 287-300
CODEN: BJPCBM
DT Journal
LA English
AB A hypothesis is outlined for predicting the conditions in which the addn. of a second competitive antagonist will increase rather than decrease the response to an agonist; the hypothesis was tested in guinea pig ileum with hexyltrimethylammonium bromide (I) [2650-53-5] as the agonist and benzilyltropine methiodide bromide (II) [53954-93-1] and pentyltriethylammonium bromide (III) [13028-70-1] as the slow and fast antagonists, resp. The results were consistent with the hypothesis provided the affinity const. for I was 2.7-3.7 .times. 104M-1 and the dissocn. time consts. for II and III were >10 min and <10 sec, resp.
IT **21735-94-4**
RL: PROC (Process)
(interactions of, with hexyltrimethylammonium bromide receptors)
RN 21735-94-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● I^-

L12 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1972:535027 CAPLUS
DN 77:135027
TI Synthesis and pharmacological study of tropine esters of .alpha.-substituted tropic acid
AU Koretskaya, N. I.; Lizgunova, M. V.; Shvarts, G. Ya.; Magidson, O. Yu.; Mashkovskii, M. D.
CS Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
SO Khim.-Farm. Zh. (1972), 6(7), 3-8
CODEN: KHFZAN
DT Journal
LA Russian
AB Twelve tropine esters of .alpha.-substituted phenylacetic acids were subjected to hydroxymethylation by dimethylformamide [68-12-2] in the presence of catalytic amts. of Na ethylate. Hydroxymethylation of atropine [51-55-8] yielded apoatropine [500-55-0] and .alpha.-hydroxymethyltropic acid tropine ester (I) [16655-61-1]. Pharmacol. tests on mice, cats, and guinea pigs treated with 12 of the 26 synthesized compds. showed that all were similar to atropine in peripheral action, with I exerting the strongest cholinolytic activity. Tropacin analogs exhibited lower central and peripheral cholinolytic activity than the parent compd. Substitution of a hydroxymethyl group for the H atom on the

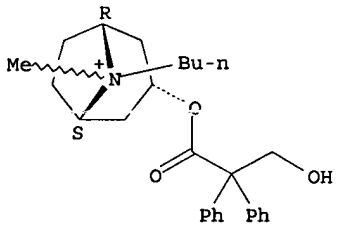
.alpha.-C of the acidic part of the tropaphen nucleus decreased the adrenolytic properties without affecting the weak cholinolytic activity. Most of the compds. exhibited antihistaminic activity, with tropanyl .alpha.-phenylbenzeneacetate [6878-98-4] and 3-tropanyl 4-chloro-.alpha.-phenylbenzeneacetate [36653-94-8] the most active.

IT **38545-50-5 38545-64-1**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacol. of)

RN 38545-50-5 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 8-butyl-3-(3-hydroxy-1-oxo-2,2-diphenylpropoxy)-8-methyl-, bromide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.

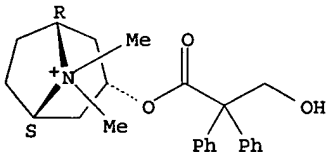


● Br^-

RN 38545-64-1 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-(3-hydroxy-1-oxo-2,2-diphenylpropoxy)-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● I^-

L12 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2002 ACS

AN 1972:470643 CAPLUS

DN 77:70643

TI Effect of deoxycorticosterone on bioelectric phenomena in the cell membrane and on the contractility of rat myometrium previously inhibited by spasmolytic drugs

AU Malecki, Henryk

CS Inst. Poloznictwa Chorob Koiecych, Akad. Med., Bialystok, Pol.

SO Ginekol. Pol. (1972), 43(2), 141-7
CODEN: GIPOA3

DT Journal

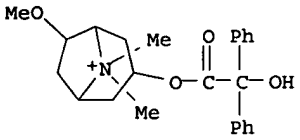
LA Polish

AB Deoxycorticosterone (I) [64-85-7] potentiated the decrease in amplitude and frequency of contraction induced by adrenaline [51-43-4], papaverine [58-74-2], and palerol [**143-92-0**] in the isolated rat myometrium. When used in conjunction with I, small doses of the spasmolytic drugs produced the same effects as large doses applied alone.

IT **143-92-0**
RL: BIOL (Biological study)
(heart contraction inhibition by, deoxycorticosterone potentiation of)

RN 143-92-0 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)

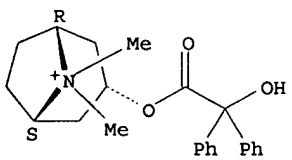


● Br^-

L12 ANSWER 32 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1972:443065 CAPLUS
DN 77:43065
TI Stereochemical studies of antimuscarinic agents. Diastereoisomeric esters of 3-tropanol, 1,3-dimethyl-4-piperidinol, and related compounds
AU Biggs, D. F.; Casy, A. F.; Jeffery, W. K.
CS Fac. Pharm. Pharm. Sci., Univ. Alberta, Edmonton, Alberta, Can.
SO J. Med. Chem. (1972), 15(5), 506-9
CODEN: JMCMAR
DT Journal
LA English
AB Isomeric tropanol esters, and the analogous 1,3-dimethyl-4-piperidinol [3518-80-7] esters which lack the 2,6-bimethylene bridge, showed a clear preference for the axial arrangement of the ester group for blockade of muscarinic receptors in the guinea pig ileum. Thus, 3.alpha.-tropanol benzilate methiodide (I) [**21735-94-4**] and 3.beta.-tropanol benzilate methiodide (II) [**35174-61-9**] had relative potencies of 1047 and 389, resp. (atropine=1000). Substituents .alpha. to the acyloxy group, whether axial or equatorial, lead to pronounced falls in the cholinolytic potency. Differences in the mydriatic ED50 values of isomeric pairs were insignificant. The most potent compd. tested was 1-methyl-3-piperidyl benzilate (III) [3321-80-0], with a relative potency of 1,549.

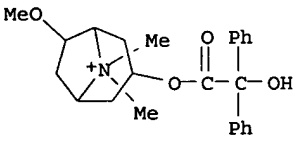
L12 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1972:94790 CAPLUS
DN 76:94790
TI Action of cholinolytics (anticholinergics) of the atropine group used in association with polyvinol
AU Lebedeva, D. P.
CS Leningr. Sanit.-Gig. Med. Inst., Leningrad, USSR
SO Farmakol. Toksikol. (Moscow) (1971), 34(6), 657-9
CODEN: FATOAO
DT Journal
LA Russian
AB Combined i.v. administration with polyvinol decreased the amplitude and duration of the cholinolytic activity of atropine [51-55-8], atropine iodomethylate [17444-28-9], and glypin iodomethylate [**21735-94-4**] in cats, but did not affect that of glypin (I) [3736-36-5]. The effect of polyvinol interaction seemed to vary directly with the size of the charge on the quaternary nitrogen atom of the cholinolytic mol.
IT **21735-94-4**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(parasympatholytic activity of, polyvinol lowering of)
RN 21735-94-4 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



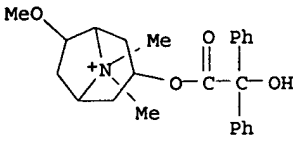
I^-

L12 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1970:459245 CAPLUS
DN 73:59245
TI Detection of benzilic acid esters
AU Yalcindag, Orhan N.
CS Abt. Arzneimittelkontr., Refik Saydam--Zentralinst. Hyg., Ankara, Turk.
SO Pharmazie (1970), 25(3), 157-8
CODEN: PHARAT
DT Journal
LA German
AB Color reactions with H_2SO_4 and Marquis reagent (I) (HCHO-H_2SO_4 mixt.), and the formation of cryst. products after treatment with alkaloids were used to identify mepenzolate bromide, pipenzolate-MeBr (II), tropenzilin bromide, tropinyl benzoate-HCl, N,N-dimethyl-N-n-octyl-N-(.beta.-diethyl benzilate)ammonium bromide, and clidinium bromide. These compds. gave red orange to carmine red solns. with H_2SO_4 which quickly faded, and gave dark blue-green solns. with I. The application of heat during H_2SO_4 addn. gave solns. which retained the red color. Characteristically shaped crystals were obtained for all the compds. except II by treating them with aq. solns. of $H_2(PtCl_6)$ and NaBr, $MgCl_2$, and other alkaloids.
IT 143-92-0
RL: PROC (Process)
(identification of)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



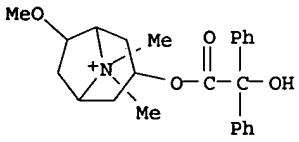
● Br^-

L12 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1969:522166 CAPLUS
DN 71:122166
TI Actions of atropine, tropenziline, and N-butylhyoscine bromide on the isolated distal colon of the guinea pig: comparison of their activities and mechanisms of action
AU Lecchini, S.; Del Tacca, M.; Soldani, G.; Frigo, G. M.; Crema, A.
CS Dep. Pharmacol., Univ. Pisa, Pisa, Italy
SO J. Pharm. Pharmacol. (1969), 21(10), 662-7
CODEN: JPPMAB
DT Journal
LA English
AB In the guinea pig isolated distal colon, the order of anticholinergic activity is as follows: atropine > tropenziline bromide > N-butylhyoscine bromide. The redn. in the responses to pelvic and transmural stimulation produced by tropenziline and N-butylhyoscine bromide is due partly to their ganglion-blocking activity. This effect also explains the redn. they cause in acetylcholine output during pelvic nerve and transmural stimulation. Since atropine also reduces acetylcholine release during pelvic nerve stimulation, it is suggested that muscarinic receptors of the parasympathetic ganglia are involved in the transmission of pelvic nerve impulses.
IT 143-92-0
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(parasympatholytic activity of)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

L12 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1969:500086 CAPLUS
DN 71:100086
TI Effect of adenosine triphosphate on the action of spasmolytic drugs
AU Lapinski, Zbigniew
CS Akad. Med., Bialymstok, Poland
SO Ginekol. Pol. (1969), 40(5), 481-90
CODEN: GIPOA3
DT Journal
LA Polish
AB The effect of ATP (I) upon the isolated uterine muscles and the bioelec. potentials of their cells was studied before and after perfusion with papaverine (II) and palerol (III) as spasmolytics. The uterine cell contractility in this expt. was registered kymographically and the bioelec. potentials of the uterine muscle cells were recorded using the technique of Link and Gerard, the glass electrode being inserted into a single cell. Perfusion with I potentiated the spasmolytic effect of II and III and polarized the cell membrane. The sequence of administration of I, II, or III did not affect the results of the expt.
IT **143-92-0**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(uterus response to, adenosine triphosphate effect on)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)

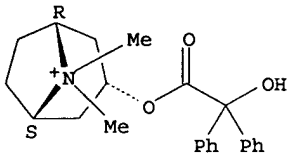


● Br^-

L12 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1969:420686 CAPLUS
DN 71:20686
TI [Drug] potentiation by an antagonist
AU Stephenson, R. P.; Ginsborg, B. L.
CS Univ. Edinburgh, Edinburgh, Scot.
SO Nature (1969), 222(5195), 790-1
CODEN: NATUAS
DT Journal
LA English
AB If drugs b and c are competitive antagonists of drug a, then addn. of c to a system in which b was already present would seemingly increase the degree of block. But where the receptors are exposed to the agonist for only a short time there is another possibility. If the 1st antagonist dissoc. slowly from the receptors and the 2nd rapidly, the addnl. presence of the 2nd antagonist may increase the no. of receptors effectively available to the agonist. This paradoxical effect was demonstrated in expts. on the guinea pig ileum with benzilyltropine methiodide as the slow antagonist, pentyltriethyl-ammonium iodide as the fast antagonist, and hexyltrimethyl-ammonium iodide as the agonist.
IT **21735-94-4**
RL: BIOL (Biological study)
(intestines response to ammonium compds. and)
RN 21735-94-4 CAPLUS

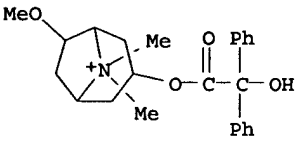
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-8,8-dimethyl-, iodide, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● I^-

L12 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1967:114393 CAPLUS
DN 66:114393
TI The influence of spasmolytic drugs on the electric activity of the rat uterine muscle cell membrane
AU Zasztowt, Otton; Kadzewicz, Krystyna
CS Klin. Poloznictwa Chorob Kobiecych AM, Bialystok, Poland
SO Ginekol. Pol. (1966), 37(12), 1281-6
CODEN: GIPOA3
DT Journal
LA Polish
AB cf. preceding abstr. The uterine horns of rats in estrus were placed in a soln. and elec. activities were recorded according to the method of Z. and K. (CA 64, 1110a). Their resting potentials were 28-32 mv. Librium, Palerol, and Duvadilan (isoxsuprine) heightened them to 100-4, papaverine and adrenaline to 93, and atropine and ephedrine to 52-5 mv. The higher the dose, the higher the potential increase. The amplitude of the action potentials was 92-4 mv. and the frequency was 2.6-2.7/sec. Librium, palerol, Duvadilan, papaverine, and adrenaline diminished the amplitude and frequency. Higher doses of these drugs abolished the action potentials totally. Atropine and adrenaline only diminished the amplitude and frequency in all concns. used.
IT **143-92-0**
RL: BIOL (Biological study)
(uterus electrical activity after treatment with)
RN 143-92-0 CAPLUS
CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



● Br^-

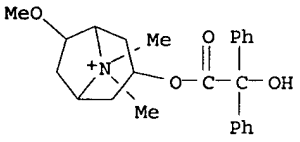
L12 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2002 ACS
AN 1967:114392 CAPLUS
DN 66:114392
TI Action of spasmolytic drugs on uterine contractility
AU Zasztowt, Otton; Kadzewicz, Krystyna
CS Klin. Poloznictwa Chorob Kobiecych AM, Bialystok, Poland
SO Ginekol. Pol. (1966), 37(12), 1271-9
CODEN: GIPOA3
DT Journal
LA Polish
AB cf. following abstr. The uterine horns of rats in estrus were placed in a soln. contg. NaCl 125, KCl 4, CaCl 1.8, NaHCO3 9, NaH2PO4 0.42, and glucose 26.6 mM. Papaverine 0.004, Palerol 2, librium 1, Duvadilan (isoxsuprine) 0.001, atropine 0.2, adrenaline 0.002, and ephedrine 5 mg./100 ml. diminished the amplitude of the uterine contractions. Higher doses of all drugs except ephedrine and atropine inhibited the

contractions totally. All drugs except ephedrine and atropine diminished the initial tension of the uterine musculature. Palerol, librium, and Duvadilan diminished the frequency of the contractions; atropine, ephedrine, papaverine, and adrenaline enhanced it.

IT **143-92-0**
RL: BIOL (Biological study)
(uterus contraction in response to)

RN 143-92-0 CAPLUS

CN 8-Azoniabicyclo[3.2.1]octane, 3-[(hydroxydiphenylacetyl)oxy]-6-methoxy-8,8-dimethyl-, bromide (9CI) (CA INDEX NAME)



● Br^-